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### Environmental Soft Law as a Governance Strategy

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**SPECIAL ISSUE**

**ENVIRONMENTAL SOFT LAW AS  
A GOVERNANCE STRATEGY**

**Cary Coglianese\***

**ABSTRACT:** Soft law governance relies on nongovernmental institutions that establish and implement voluntary standards. Compared with traditional hard law solutions to societal and economic problems, soft law alternatives promise to be more politically feasible to establish and then easier to adapt in the face of changing circumstances. They may also seem more likely to be flexible in what they demand of targeted businesses and other entities. But can soft law actually work to solve major problems? This Article considers the value of soft law governance through the lens of three major voluntary, nongovernmental initiatives that address environmental concerns: (1) ISO 14001 environmental management systems; (2) sustainable forest certification systems; and (3) LEED standards for energy efficient buildings. Taken together, these case studies indicate that, even though soft law governance may hold considerable theoretical appeal, it can also be quite limited in what it actually achieves. Decision-makers should rely on soft law governance only with full recognition of its limitations as well as its alluring characteristics.

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The quality of human life depends on maintaining the quality of the natural environment. As a result, governmental institutions in the United States—as in other developed countries—have responded to the need to protect the environment by adopting numerous laws and regulations, and by establishing organizations and programs to enforce them. For example, the U.S. Congress has passed several dozen major environmental, natural resource, and energy conservation

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statutes since the 1970s, including the Clean Air Act,<sup>1</sup> the Clean Water Act,<sup>2</sup> and the Energy Policy and Conservation Act.<sup>3</sup> In addition, federal agencies such as the U.S. Environmental Protection Agency, U.S. Department of Energy, and U.S. Department of Interior have adopted thousands of regulations implementing legislation with the aim of promoting energy conservation, environmental quality, and natural resource protection. A similar pattern of environmental governance, one that relies on the enforcement of legislation and regulation, exists throughout the developed world.<sup>4</sup>

Yet, despite the proliferation of environmental hard law in the form of legislation and regulation, important environmental concerns persist that still need attention and effective governance. For example, the United States has long lacked any federal legislation on climate change. Other important environmental concerns, such as pollution runoff into waterways and the energy efficiency of buildings, have also remained virtually unaddressed by federal law in the United States. Looking more broadly around the world, emerging economies still often lack the kind of strong public institutions needed to support cost-effective systems of hard law that can address environmental problems.<sup>5</sup> This is true even though some of these developing countries face serious environmental problems, whether from natural resource extraction or from the shift of polluting industries from developed to developing countries.

In both the developed and developing world, a common response to gaps and failings in a hard law approach to environmental governance has been to look toward forms of “soft law”—that is, to nonbinding norms and standards that aim to promote environmental and natural resource protection.<sup>6</sup> Soft law

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1. Clean Air Amendments of 1970, Pub. L. No. 91-604, § 6(a), § 202, 84 Stat. 1690 (codified as amended at 42 U.S.C. § 7401).

2. Pub. L. No. 92-500, 86 Stat. 816 (1972) (codified as amended at 33 U.S.C. §§ 1251–1387).

3. Pub. L. No. 94-163, § 401(b)(1), 89 Stat. 946 (1975) (codified as amended at 42 U.S.C. §§ 6272–6273, 6294).

4. See, e.g., U.N. Environment Programme, *Environmental Rule of Law: First Global Report*, U.N. Job No. DEL/2227/NA (Jan. 24, 2019).

5. See generally Ruth Greenspan Bell & Clifford Russel, *Environmental Policy for Developing Countries*, ISSUES SCI. TECH., Spring 2002, at 63.

6. The concept of “soft law” has seen considerable application and development in the context of international or transnational governance, where the diffusion of nonbinding norms stands in contrast to the establishment of “hard law” or binding legal standards—such as through treaties. See generally Kenneth W. Abbott & Duncan Snidal, *Hard and Soft Law in International Governance*, 54 INT’L ORG. 421 (2000); Edith Brown Weiss, *Voluntary Commitments as Emerging Instruments of International Environmental Law*, 44 ENV’T POL’Y & L. 83 (2014); Gregory C. Shaffer & Mark A. Pollack, *Hard vs. Soft Law: Alternatives, Complements and Antagonists in International Governance*, 94 MINN. L. REV. 706 (2010); CHRIS BRUMMER, *SOFT LAW AND THE GLOBAL FINANCIAL SYSTEM: RULE MAKING IN THE 21ST CENTURY* (2d ed. 2015); TIM BARTLEY, *RULES WITHOUT RIGHTS: LAND, LABOR, AND PRIVATE AUTHORITY IN THE GLOBAL ECONOMY* (2018). But the soft law concept also has been applied in the domain of domestic governance. Sometimes this takes the meaning of nonbinding sources of normative statements issued by governmental bodies. See generally Ryan Hagemann et al., *Soft Law for Hard Problems: The Governance of Emerging Technologies in an Uncertain Future*, 17 COLO. TECH. L.J. 37 (2018); Jamison E. Colburn, *Agency Interpretations*, 82 TEMP. L. REV. 657 (2009); Jacob E. Gersen & Eric A. Posner, *Soft Law: Lessons from Congressional Practice*, 61 STAN. L. REV. 573 (2008). Often, as in this Article, the term *soft*

approaches can be thought preferable because they at least offer something to do when nothing else seems possible. Moreover, it is sometimes suggested that soft law can more deeply embed strong norms of environmental responsibility in business behavior and more broadly diffuse these same norms across industry, ultimately offering the prospect of more sustained environmental change over time.<sup>7</sup>

Whatever the justification for considering soft law, it is important to understand that environmental soft law takes different forms and emanates from different sources. Some of these sources are nongovernmental—that is, private or professional standards-setting organizations, or even industry groups or trade associations. Other sources are governmental entities themselves, when they adopt nonbinding guidance materials or create voluntary programs that encourage regulated entities to go beyond compliance with existing regulatory standards.<sup>8</sup> Regardless of the source, environmental soft law seeks to achieve the same basic objective as hard law. It seeks to shape individual or business behavior in such a manner as to reduce harmful impacts on environmental conditions, such as air quality or levels of toxic pollution in waterways, or the health of natural resources, such as forest ecosystems.

This Article offers a general consideration of the advantages and disadvantages of soft law as an alternative governance strategy to hard law. As should be evident by its nonbinding nature, soft law does not demand a great deal of public governing institutions, as nongovernmental institutions can be, and often are, the primary drivers of environmental soft law. For this reason, soft law strategies will likely be viable even in the face of disagreement and logjams in political institutions, such as those that prevail within the U.S. Congress on many issues.<sup>9</sup> The nonbinding nature of soft law also means it does not necessitate the same kind of governmental capacity for monitoring and enforcement that hard

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law takes the form of nonstate standards or certification programs—also sometimes called “civil regulation,” “entrepreneurial authority,” or, most commonly, “voluntary environmental programs.” See generally David Vogel, *Private Global Business Regulation*, 11 ANN. REV. POL. SCI. 261 (2008) (“civil regulation”); JESSICA F. GREEN, *RETHINKING PRIVATE AUTHORITY: AGENTS AND ENTREPRENEURS IN GLOBAL ENVIRONMENTAL GOVERNANCE* (2014) (“entrepreneurial authority”); Nicole Darnall & Stephen Sides, *Assessing the Performance of Voluntary Environmental Programs: Does Certification Matter?*, in *VOLUNTARY ENVIRONMENTAL PROGRAMS: A POLICY PERSPECTIVE* (Peter DeLeon & Jorge E. Rivera eds., 2010) (“voluntary environmental programs”). The main concern in this Article is whether or how such voluntary environmental programs can be used as a tool to drive the behavior of individuals and business organizations in ways that have a positive impact on the environment.

7. See generally MICHAEL VANDENBERGH & JONATHAN M. GILLIGAN, *BEYOND POLITICS: THE PRIVATE GOVERNANCE RESPONSE TO CLIMATE CHANGE* (2017). For a recent review of empirical studies on social norms and environmental behavior, see Katherine Farrow et al., *Social Norms and Pro-Environmental Behavior: A Review of the Evidence*, 140 ECOLOGICAL ECON. 1 (2017).

8. See, e.g., Cary Coglianese & Jennifer Nash, *Government Clubs: Theory and Evidence from Voluntary Environmental Programs*, in *VOLUNTARY PROGRAMS: A CLUB THEORY APPROACH* 231, 231–58 (Matthew Potoski & Aseem Prakash eds., 2009).

9. For discussion of the “logjammed Congress” as it pertains to issues of environmental protection, see DAVID SCHOENBROD ET AL., *BREAKING THE LOGJAM: ENVIRONMENTAL PROTECTION THAT WILL WORK* (2010).

law demands, making it a potentially viable governance strategy in parts of the world that lack well-functioning public sector institutions. Of course, the possibility of adopting soft law when hard law is not feasible does not necessarily mean soft law will be superior to hard law; it only means that at times soft law may be superior to doing nothing at all. That said, it is theoretically possible that, in some cases, soft law could indeed be superior to hard law. The question will ultimately be an empirical one.

In the Parts that follow, I present case studies of three major nongovernmental soft law initiatives related to environmental problems: (1) ISO 14001 environmental management systems; (2) private certification systems for sustainable forestry; and (3) LEED standards for green building design.<sup>10</sup> For each of the three case studies, I outline the history of the respective soft law initiative, explain how it works, and discuss what can be said about the level of impact each has had in terms of industry participation and, where possible, environmental conditions. In all three cases, levels of participation are quite modest and the environmental effects seem to be rather small.

In the final Part, I draw out issues and lessons about governance that emerge from these case studies of soft law as applied to environmental concerns. Although soft law approaches appear to have considerable promise due to their greater feasibility of adoption and the flexibility in implementation that they can offer, soft law governance can also be quite limited in what it actually achieves. Decision-makers should approach soft law governance with their eyes wide open to its limitations as well as to its appeal.

The aim in offering these three case studies is to help make concrete what a soft law approach to governance means and to showcase some of the various forms it can take. Choosing between soft law and hard law in any policy area—including artificial intelligence, nanotechnology, or other new technologies—will necessitate a consideration of the strengths and weaknesses of each governance approach.<sup>11</sup> It will also be important to pay attention to the details of how soft law programs are designed. Just as hard law can vary in its design (e.g., performance or ends standards versus means standards),<sup>12</sup> soft law can come in a variety of shapes and sizes too, even when they share certain commonalities. Any policy decision that entails a choice between hard law and soft law will benefit from a consideration of the specifics of any proposed legal regime, as

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10. These three case studies are but a few of many possible examples that could be offered of soft law approaches to environmental governance. In no sense can they be said to reflect a representative sample of all possible environmental soft law programs or initiatives. They are, however, some of the most established and, perhaps most importantly, best-studied examples of environmental soft law. This makes them appropriate cases to turn to in an effort to distill available lessons from common features, possibilities, and impacts of soft law as an environmental governance strategy.

11. See generally Gary Marchant, “Soft Law” *Governance of Artificial Intelligence*, AIPULSE (Jan. 15, 2019), <https://aipulse.org/soft-law-governance-of-artificial-intelligence/> [<https://perma.cc/5SN9-KJ-B4>]; Kenneth W. Abbott et al., *Soft Law Oversight Mechanisms for Nanotechnology*, 52 JURIMETRICS J. 279, 279–83 (2012); Hagemann et al., *supra* note 6.

12. See NAT’L ACADS. OF SCIS., ENG’G, & MED., DESIGNING SAFETY REGULATIONS FOR HIGH-HAZARD INDUSTRIES 30 (2018); NEIL GUNNINGHAM & PETER GRABOSKY, SMART REGULATION: DESIGNING ENVIRONMENTAL POLICY 53 (1999).

well as lessons that can be gleaned from experience with similar regimes and approaches. The key to effective decision-making about any form of governance—soft or hard—is to consider how different options are likely to fare with respect to addressing a particular type of problem within a specific institutional setting.

## **I. ENVIRONMENTAL MANAGEMENT SYSTEMS**

The first case study centers on international standards for environmental management systems (EMSs). An EMS is a formal set of plans, procedures, and practices that a business or other organization establishes to monitor and improve its overall environmental performance.<sup>13</sup> Such a system urges organizations to take a holistic approach with respect to the environmental impacts of their operations—an approach that is thought to be desirable and distinctive. Much of hard environmental law tends to be media specific (that is, it comprises separate laws for air, water, hazardous wastes, and so forth). But intersections and tradeoffs often exist between different media. In the end, it is an organization's *overall* environmental impacts that matter from the standpoint of public health and welfare, and an EMS is intended to help managers focus on—and manage—their organizations' overall environmental performance. As such, even in countries that lack any hard mandate for businesses to adopt such systems for managing their environmental impacts, a soft law surrounding EMSs has emerged on the basis of standards adopted by the International Organization for Standardization, or ISO.<sup>14</sup>

ISO is an independent, nongovernmental organization based in Geneva. It was created in London in 1946 “to facilitate the [international] coordination and unification of [industrial] standards.”<sup>15</sup> By 2019, ISO had published over 20,000 standards that provide specifications for products, services, processes, and systems with the aim of promoting product quality, workplace safety, and operational efficiency.<sup>16</sup> Among ISO's many sets of standards is one identified as the ISO 14000 series on EMSs. ISO 14000 has become globally recognized as articulating best practices in the operation of an EMS. The ISO 14000 series “maps out a framework that a company or organization can follow to set up an

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13. Cary Coglianese & Jennifer Nash, *Environmental Management Systems and the New Policy Agenda*, in *REGULATING FROM THE INSIDE: CAN ENVIRONMENTAL MANAGEMENT SYSTEMS ACHIEVE POLICY GOALS?* 1, 1–2 (Cary Coglianese & Jennifer Nash eds., 2001).

14. ISO's EMS standards call for organizations to consider how their operations affect “air pollution, water and sewage issues, waste management, soil contamination, climate change mitigation and adaptation, and resource use and efficiency.” INT'L ORG. FOR STANDARDIZATION, INTRODUCTION TO ISO 14001:2015, at 3 (2015), <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100371.pdf> [<https://perma.cc/CB8W-UQUZ>].

15. Sandrine Tranchard, *ISO Celebrates 70 Years*, INT'L ORG. FOR STANDARDIZATION (Feb. 23, 2017), <https://www.iso.org/news/2017/02/Ref2163.html> [<https://perma.cc/VLG7-RKLR>]. For an overview of the ISO, see Stepan Wood, *International Organization for Standardization*, in *BUSINESS REGULATION AND NON-STATE ACTORS: WHOSE STANDARDS? WHOSE DEVELOPMENT?* 82 (Ananya Mukherjee Reed et al. eds., 2012) (ebook).

16. *See About Us*, INT'L ORG. FOR STANDARDIZATION, <https://www.iso.org/about-us.html> [<https://perma.cc/TW5U-58BW>].

effective environmental management system.”<sup>17</sup> This framework is not mandated by ISO—indeed, ISO has no governmental, mandatory authority. But companies that wish to say that they have adopted the best environmental management practices will often follow the standards set out by ISO, and they may even seek to have a third party certify their EMSs’ conformity with the ISO norms.

ISO is made up of members from about 165 countries.<sup>18</sup> Each participating country is represented by a standards organization that elects or appoints representatives to be ISO members.<sup>19</sup> The U.S. standards organization is the American National Standards Institute (ANSI),<sup>20</sup> a nongovernmental organization comprised primarily of members from industry and academe. ANSI also includes representation from governmental bodies, such as the Environmental Protection Agency (EPA), the Occupational Safety and Health Administration, and the Department of Energy.<sup>21</sup> Among other countries’ standards organizations that comprise ISO, some are nongovernmental, like the United States’, while others are part of a country’s government.

Technical committees develop ISO standards, and these committees, which largely operate on the basis of consensus, comprise industrial, technical, and business sector experts nominated by members.<sup>22</sup> These experts often include representatives from relevant businesses, trade associations, government agencies, laboratories, and consumer associations, along with environmental or consumer advocates and university-based researchers.<sup>23</sup>

ISO first adopted its EMS standards in 1996,<sup>24</sup> but the impetus for their development can be traced to 1987 when “sustainable development” came to be expressed as a goal of the World Commission on the Environment and Development, a United Nations’ (U.N.) body.<sup>25</sup> During a subsequent U.N. conference on the environment in Rio De Janeiro in 1992, sustainable development reemerged as a principal theme. Out of that 1992 U.N. conference came Agenda 21, an international compact that encouraged businesses to implement codes that

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17. *ISO 14000 Family—Environmental Management*, INT’L ORG. FOR STANDARDIZATION, <https://www.iso.org/iso-14001-environmental-management.html> [<https://perma.cc/XE9Y-VGQB>].

18. *Members*, INT’L ORG. FOR STANDARDIZATION, <https://www.iso.org/members.html> [<https://perma.cc/W4YE-Q4QZ>].

19. *Id.*; see also INT’L ORG. FOR STANDARDIZATION, *ISO MEMBERSHIP MANUAL 6* (2015), <https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100399.pdf> [<https://perma.cc/L83X-SWQK>].

20. Paulette L. Stenzel, *Can the ISO 14000 Series Environmental Management Standards Provide a Viable Alternative to Government Regulation?*, 37 AM. BUS. L. J. 237, 240 (2000).

21. Kristyn Wilcox, *ISO 14001: An Analysis* 17 (2007) (class paper, U.C. San Diego, IR/PS CSR Case No. 07-10), [https://gps.ucsd.edu/\\_files/faculty/gourevitch/gourevitch\\_cs\\_wilcox.pdf](https://gps.ucsd.edu/_files/faculty/gourevitch/gourevitch_cs_wilcox.pdf) [<https://perma.cc/W7UG-WNN3>].

22. See *id.* at 18, 35 app. XII; Stenzel, *supra* note 20, at 240–41.

23. See generally Stenzel, *supra* note 20.

24. Matthew Potoski & Aseem Prakash, *Green Clubs and Voluntary Governance: ISO 14001 and Firms’ Regulatory Compliance*, 49 AM. J. POL. SCI. 235, 237 (2005).

25. Stenzel, *supra* note 20, at 237.

establish “best environmental practice[s].”<sup>26</sup> That same year, the British Standards Institute launched its own nonbinding environmental management standard.<sup>27</sup> The following year, the European Union developed the Eco-Management and Audit Scheme (EMAS), a voluntary standard aimed at encouraging businesses to pursue continuous improvements in their environmental performance.<sup>28</sup>

Throughout the early 1990s, “many companies began to realize that the public was becoming very concerned about environmental issues, and that ‘green’ issues were affecting consumer choices as well as investment decisions.”<sup>29</sup> Businesses were also interested in possible alternatives to the so-called command-and-control nature of hard environmental law, and they saw environmental management systems as a possible substitution for the imposition of additional regulatory mandates. If companies could demonstrate that they could systematically and responsibly manage their own environmental affairs under the EMS rubric, perhaps the pressure for more regulation could be abated.

ISO formally began working on developing international EMS standards in 1992.<sup>30</sup> In launching this effort, ISO sought to build upon what had been widely perceived as the success of one of its earlier standards, known as ISO 9000, which articulated best practices for improving the quality of product manufacturing. ISO 9000 was based around what engineers call a “plan-do-check-act” model, which originated with the work of Edward Deming in the 1950s.<sup>31</sup> The plan-do-check-act model organizes internal management around a well-specified goal and calls for managers to develop plans, policies, and procedures for achieving that goal. It also calls for active monitoring of compliance with plans and policies, along with ongoing evaluation and adjustment of plans and policies in an effort to seek continuous improvement.<sup>32</sup> The ISO 9000 standards used this model to guide companies in the development of management systems aimed at improving the quality of their products and services.<sup>33</sup>

Using ISO 9000 as a model, the ISO’s technical committee on EMSs released a draft set of standards in 1995 comprising ISO 14001, the standards for environmental management systems (EMSs), along with a set of guiding documents and principles.<sup>34</sup> In 1996, the ISO membership formally approved its

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26. THE EARTH SUMMIT: THE UNITED NATIONS CONFERENCE ON ENVIRONMENT AND DEVELOPMENT (UNCED) § 30.10, at 430 (Stanley P. Johnson ed., 1993).

27. Paula C. Murray, *Inching Toward Environmental Regulatory Reform—ISO 14000: Much Ado About Nothing or a Reinvention Tool?*, 37 AM. BUS. L.J. 35, 41 (1999).

28. *Id.*

29. *Id.* at 41–42.

30. *Id.* at 42.

31. Ronald D. Moen & Clifford L. Norman, *Circling Back: Clearing Up Myths About the Deming Cycle and Seeing How It Keeps Evolving*, QUALITY PROGRESS, Nov. 2010, at 22, 22–28.

32. *Id.* at 26.

33. See generally D.H. STAMATIS, UNDERSTANDING ISO 9000 AND IMPLEMENTING THE BASICS TO QUALITY (1995).

34. Eric Neumayer & Richard Perkins, *What Explains the Uneven Take-Up of ISO 14001 at the Global Level? A Panel-Data Analysis*, 36 ENV’T & PLAN. 823, 825 (2004); Murray, *supra* note 27, at 42.



EMS standards.<sup>35</sup> Together, the standards and guiding materials call for companies to follow the plan-do-check-act model with respect to their environmental performance.<sup>36</sup> They emphasize having companies perform their own internal risk analyses and develop their own internal policies—in effect, to regulate themselves.<sup>37</sup> The ISO 14000 standards do not call for companies to achieve any particular level of environmental performance, beyond whatever they may be required to achieve under hard law. Instead, the standards set out what is essentially a step-by-step process by which companies set their own goals and seek their own ways of managing their environmental impacts, such as by reducing the use of water and energy resources or the release of pollution.<sup>38</sup>

If a company so desires, it can seek to have its EMS “certified” by submitting it to a third-party audit. If the company can demonstrate to the auditor that its system meets all the ISO standards, the company’s EMS will be deemed to be certified.<sup>39</sup> Certification does not necessarily mean that a company has met any particular level of environmental performance, but it does provide a signal that the company’s system conforms to the planning, documentation, and implementation criteria set forth in ISO 14001.<sup>40</sup>

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35. Murray, *supra* note 27, at 42.

36. See generally Cary Coglianese & Jennifer Nash, *Compliance Management Systems: Do They Make a Difference?*, in THE CAMBRIDGE HANDBOOK OF COMPLIANCE (Benjamin van Rooij & D. Daniel Sokol eds., forthcoming 2021); Matthew Potoski & Aseem Prakash, *Do Programs Reduce Pollution? Examining ISO 14001’s Effectiveness Across Countries*, 41 POL’Y STUD. J. 274 (2013).

37. Coglianese & Nash, *supra* note 8.

38. According to ISO’s policies, its standards are reviewed every five years. Since 1996, two key sets of revisions to ISO 14000 have been implemented, in 2004 and 2015, respectively. In 2015, ISO added new clauses to ISO 14000 standards calling for greater consideration of various stakeholder interests, enhanced top management responsibilities, and taking into greater account the environmental impacts of the full life cycle of any products the organization produces—as well as the environmental impacts of any outsourcing of activities. *ISO 14001:2015*, INT’L ORG. FOR STANDARDIZATION, <https://www.iso.org/standard/60857.html> [<https://perma.cc/NG47-VP6S>]; see also *Comparison Matrix ISO 14001:2015 vs ISO 14001:2004*, AM. SYS. REGISTRAR (Dec. 11, 2015), [http://www.asrworldwide.com/images/Quality\\_Registrar/Presentations/ISO-14001-2015-2004-correlation-matrix.pdf](http://www.asrworldwide.com/images/Quality_Registrar/Presentations/ISO-14001-2015-2004-correlation-matrix.pdf) [[https://web.archive.org/web/20171118051140/http://www.asrworldwide.com/images/Quality\\_Registrar/Presentations/ISO-14001-2015-2004-correlation-matrix.pdf](https://web.archive.org/web/20171118051140/http://www.asrworldwide.com/images/Quality_Registrar/Presentations/ISO-14001-2015-2004-correlation-matrix.pdf)]; *ISO 14001:2015—Main Changes Since 2004 Edition*, INT’L ORG. FOR STANDARDIZATION, <http://committee.iso.org/sites/tc207sc1/home/projects/published/iso-14001---environmental-manage/main-changes.html> [<https://perma.cc/9RKN-72QW>]. Other standards have become part of the 14000 series of standards, in addition to ISO 14001. ISO 14006, for example, provides voluntary guidelines for incorporating eco-design principles into an EMS. *ISO 14006:2020 Environmental Management Systems—Guidelines for Incorporating Ecodesign*, INT’L ORG. FOR STANDARDIZATION, <https://www.iso.org/standard/72644.html> [<https://perma.cc/W272-TVYS>]. For a listing of the suite of standards that make up the ISO 14000 “family,” see *What Is ISO 14001: 2015- Environmental Management Systems*, ASQ, <https://asq.org/quality-resources/iso-14001> [<https://perma.cc/Q6BV-C2WS>].

39. Matthew Potoski & Aseem Prakash, *Covenants with Weak Swords: ISO 14001 and Facilities’ Environmental Performance*, 24 J. POL’Y ANALYSIS & MGMT. 745, 751–52 (2005).

40. *Id.* at 750–51.

Over 485,000 certified facilities exist around the world,<sup>41</sup> making ISO 14001 the most well-known of any set of environmental management standards and one of ISO's most popular standards of any kind.<sup>42</sup> ISO 14001 allows organizations to approach environmental management holistically across all types of environmental impacts, which makes it possible for organizations of all types, sizes, and lines of business to use the standard as a guide for developing an EMS.<sup>43</sup> ISO does not "guarantee optimal environmental outcomes" from following ISO 14001, but it does claim that doing so will help organizations enhance their environmental performance, as well as protect the environment by "preventing or mitigating adverse environmental impacts."<sup>44</sup>

To maintain their certification, facilities must submit annually to third-party audits and undertake a complete reassessment of their EMSs every three years.<sup>45</sup> Annual audits are meant to encourage the organization to see the EMS as a long-term obligation that requires ongoing improvement and compliance.<sup>46</sup> During the audit, the auditor determines whether the EMS "conforms to planned arrangements for environmental management including the requirements of [ISO 14001] and has been properly implemented and maintained."<sup>47</sup> To determine the organization's level of compliance with the EMS, the auditor can interview anyone within the organization's workforce, including line workers and managers, and seek to assess their understanding of the EMS and its policies and requirements.<sup>48</sup> Depending on the size of the organization, audits can last anywhere from "a few weeks to several months."<sup>49</sup>

Third-party auditors are required to receive accreditation from an organization certified by an ISO-recognized accreditation authority.<sup>50</sup> To ensure auditors

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41. *ISO Survey 2019 Results—Number of Certificates and Sites per Country and the Number of Sector Overall*, INT'L ORG. FOR STANDARDIZATION, <https://isotc.iso.org/livelink/livelink?func=ll&objId=18808772&objAction=browse&viewType=1> (choose "1. ISO Survey 2019 results—number of certificates and sites per country and the number of sector overall"; then click "Open" to view the spreadsheet; then click the "Overview" tab) (last visited Dec. 28, 2020).

42. See Potoski & Prakash, *supra* note 24, at 235 ("ISO 14001 is perhaps the most important and visible voluntary environmental program . . .").

43. *ISO 14001:2015*, *supra* note 38; INT'L ORG. FOR STANDARDIZATION, *supra* note 14.

44. *ISO 14001:2015(en) Environmental Management Systems—Requirements with Guidance for Use*, INT'L ORG. FOR STANDARDIZATION, <https://www.iso.org/obp/ui/#iso:std:iso:14001:ed-3:v1:en>; see *ISO 14001:2015*, *supra* note 38.

45. See INT'L ORG. FOR STANDARDIZATION, *supra* note 14, at 7; see also *ISO 14001:2015*, *supra* note 38.

46. See NSF INT'L, ENVIRONMENTAL MANAGEMENT SYSTEMS: AN IMPLEMENTATION GUIDE FOR SMALL AND MEDIUM-SIZED ORGANIZATIONS 53 (1996), [https://www3.epa.gov/npdes/pubs/fin\\_algu.pdf](https://www3.epa.gov/npdes/pubs/fin_algu.pdf) [<https://perma.cc/3GCA-NAD3>]; see also *ISO 14001:2015*, *supra* note 38.

47. See Edwin Pinero, *Introduction to EMS Auditing Concepts and ISO 14000*, OFF. FED. ENV'T EXEC., at 2, [https://www.fedcenter.gov/\\_kd/items/actions.cfm?action=Show&item\\_id=660&destination=ShowItem](https://www.fedcenter.gov/_kd/items/actions.cfm?action=Show&item_id=660&destination=ShowItem) [<https://perma.cc/W89M-ZNGZ>] (citing Section 4.5.4 of ISO 14001 and providing an in-depth explanation of the ISO 14000 auditing process).

48. Potoski & Prakash, *supra* note 39, at 752.

49. *Id.*

50. *Id.*

are competent, the accreditation authority “performs an on-site audit of the auditor by witnessing how an auditor goes about certifying a facility.”<sup>51</sup> To prevent conflicts of interest, auditors are prohibited from performing outside consulting work for an organization pursuing certification.<sup>52</sup> The competence of the auditor is further ensured through complete reassessments of the auditor that are performed every four years.<sup>53</sup> Furthermore, during the first six months of an auditor’s accreditation, the accreditation authority conducts additional surveillance audits, and then it performs annual oversight audits for the next three years.<sup>54</sup> Auditor training requirements and accountability to a third-party accreditation authority are intended to encourage organizations seeking ISO 14001 certification to respect their auditor and take their recommendations seriously.

Despite the advantages of the ISO third-party audit system, it should not be viewed as entirely unproblematic. For one, third-party auditing can be expensive, reportedly costing anywhere from \$25,000 to over \$100,000 per facility.<sup>55</sup> For another, it is not clear what certification really means. A failed certification audit does not lead to any sanctions by ISO, other than the theoretical possibility of a loss of certification.<sup>56</sup> Such a loss, however, is hardly a realistic possibility.<sup>57</sup> As long as a company corrects any nonconformances, it can still receive its certification.<sup>58</sup> Moreover, the results of the audit, although shared with top management,<sup>59</sup> are not subject to public disclosure,<sup>60</sup> perhaps giving organizations little reason to take audit findings as seriously as some might like.<sup>61</sup>

Patterns of EMS certification vary greatly around the world. Over ninety percent of all ISO-certified facilities can be found in Europe and Asia.<sup>62</sup> As of 2019, ISO reported a total of only about 7,500 certified facilities belonging to about 3,600 businesses or other organizations in the United States.<sup>63</sup> To put this number of certified facilities in perspective, consider that the United States had a total of 290,092 manufacturing establishments in 2018, out of a total of approximately 7.9 million business establishments overall.<sup>64</sup> According to EPA

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51. *Id.*

52. *Id.* at 752–53.

53. *Id.* at 753.

54. *Id.*

55. *Id.* at 752.

56. *Id.* at 749; see also Aseem Prakash & Matthew Potoski, *International Standards Organization as a Global Governor: A Club Theory Perspective*, in WHO GOVERNS THE GLOBE? 72, 94 (Deborah D. Avant et al. eds., 2010).

57. Y. BEEJADHUR, INT’L TRADE CTR., BULL. NO. 78, AN INTRODUCTION TO ISO 14000 ENVIRONMENTAL MANAGEMENT SYSTEMS 13 (2007).

58. *Id.*

59. Pinero, *supra* note 47, at 2.

60. Potoski & Prakash, *supra* note 39, at 749.

61. *Id.* at 748.

62. *ISO Survey 2019 Results—Number of Certificates and Sites per Country and the Number of Sector Overall*, *supra* note 41 (click the “ISO 14001” spreadsheet tab).

63. *Id.*

64. U.S. CENSUS BUREAU, 2018 CBP AND NES COMBINED REPORT (2020), <https://www.census.gov/data/tables/2018/econ/nonemployer-statistics/2018-combined-report.html> (follow “U.S. & States” hyperlink).

data, at least 370,000 facilities in the United States have enough of an environmental impact to require permits under the Clean Air Act or the Clean Water Act.<sup>65</sup> This means that the proportion of U.S. businesses with ISO-certified EMSs is a tiny fraction—about 2 percent or less—of all of the facilities that could presumably benefit from an EMS. Of course, it is the case that some companies will use EMSs that were developed to meet ISO 14001's criteria but will never seek formal certification. The number of such firms, though, is unknown, precisely because they never seek certification.

When it comes to the efficacy of the ISO 14001 standards in inducing firms to make environmental improvements, many companies that have used these standards to develop an EMS report making substantial gains in their overall environmental performance by lowering pollution, energy consumption, or water usage.<sup>66</sup> Yet it is far from clear that the companies that trumpet their improvements are representative of all polluting companies with an EMS. It is possible that many more firms with such systems do not make such substantial gains. It is also possible that many companies without an EMS also make substantial improvements in their environmental performance, even if they are not as vocal about doing so.<sup>67</sup>

In addition, some concern exists that companies can comply with ISO 14001 and other process-based standards simply by going through the motions. It is one thing to have an EMS that conforms to the various paperwork requirements of ISO 14001—such as a stated environmental policy, a set of written procedures, and routinely maintained documentation—but it is another for a company to set and attain ambitious environmental goals.<sup>68</sup>

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65. The agency's main enforcement database—known as ECHO—is very dynamic. As of December 15, 2020, it listed 183,626 facilities with Clean Air Act permits and 370,492 facilities with a Clean Water Act permit. The total number of facilities with a permit under either of these statutes is surely larger than 370,492, as some facilities may only have a Clean Air Act permit. *Facility Search Results*, ECHO, <https://echo.epa.gov/facilities/facility-search?mediaSelected=all> (last visited Dec. 15, 2020) (using search types “Air” and “Water”).

66. For a discussion of survey research finding that companies report making environmental improvements following ISO certification, see Olivier Boiral et al., *Adoption and Outcomes of ISO 14001: A Systematic Review*, 20 INT'L J. MGMT. REVS. 411 (2018); Pavel Castka & Charles J. Corbett, *Management Systems Standards: Diffusion, Impact and Governance of ISO 9000, ISO 14000, and Other Management Standards*, 7 FOUNDATIONS & TRENDS TECH. INFO. & OPERATIONS MGMT. 161, 251–53 (2015). Notably, Boiral et al.'s review of the peer-reviewed literature indicates that “the causes of performance improvements other than ISO certification and the questionable reliability of the indicators analyzed are rarely addressed” by researchers. Boiral et al., *supra* at 426.

67. Some empirical research suggests that companies that come forward to trumpet their environmental progress are simply more extroverted than they are necessarily more environmentally responsible. See, e.g., Cary Coglianese & Jennifer Nash, *Performance Track's Postmortem: Lessons from the Rise and Fall of EPA's “Flagship” Voluntary Program*, 38 HARV. ENV'T L. REV. 1 (2014); Jennifer A. Howard-Grenville, Jennifer Nash, & Cary Coglianese, *Constructing the License to Operate: Internal Factors and their Influence on Corporate Environmental Decisions*, 30 LAW & POL'Y 73 (2008).

68. The concern that managers may simply go through the motions when implementing a management system has been expressed in a variety of ways. See, e.g., NAT'L ACADS. OF SCIS., ENG'G, & MED, *supra* note 12, at 111 (“pencil-whipping”); Christine Parker & Vibeke Lehmann Nielsen, *Corporate Compliance Systems: Could They Make Any Difference?*, 41 ADMIN. & SOC'Y 3, 9

More empirical research has been conducted on the impact of ISO 14001 than probably any other form of nongovernmental soft law related to the environment.<sup>69</sup> It turns out, though, that discerning the impact of ISO 14001 is not a straightforward task for two principal reasons.

First, because ISO 14001 is a form of soft law, it is voluntary, which means that those companies opting to establish an EMS and seek ISO certification are not a random sample of all companies. They may well make environmental gains, but those gains may be due less to ISO 14001, or to an EMS, than to the fact that these companies are more environmentally committed than other companies. Indeed, the very fact that a company has decided to create an EMS and seek ISO 14001 certification might well suggest that the company's leaders are more committed to responsible environmental management.<sup>70</sup>

Second, the holistic nature of ISO 14001 means that it is not designed with any particular environmental goal in mind. The flexibility that ISO 14001 affords companies in choosing their own goals means that one company may try to conserve water resources while another company may try to reduce hazardous waste generation. As such, if different companies use ISO 14001 and EMSs to pursue different goals, no single research metric of environmental performance can be said to represent ISO 14001's intended impact.

Political scientists Aseem Prakash and Matthew Potoski have done perhaps the best job of overcoming these limitations.<sup>71</sup> They address the selection bias problem created by the voluntary nature of ISO-certification by using sophisticated statistical analysis.<sup>72</sup> They tackle the metric problem by using two cross-cutting dependent variables: (1) regulatory compliance, and (2) overall releases of toxic chemicals (whether into the air, water, or ground).<sup>73</sup> As a result, when

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(2009) ("window dressing"); Garry C. Gray & Susan S. Silbey, *Governing Inside the Organization: Interpreting Regulation and Compliance*, 120 AMER. J. SOCIO. 96, 117 (2014) ("Potemkin villages").

69. For a sampling of such research, see Aseem Prakash & Matthew Potoski, *Global Private Regimes, Domestic Public Law: ISO 14001 and Pollution Reduction*, 47 COMPAR. POL. STUDS. 369 (2014); Pieter de Jong et al., *The Financial Impact of ISO 14001 Certification: Top Line, Bottom-Line, or Both?*, 119 J. BUS. ETHICS 119 (2014); Potoski & Prakash, *supra* note 39; Aseem Prakash & Matthew Potoski, *Voluntary Environmental Programs: A Comparative Perspective*, 31 J. POL'Y ANALYSIS & MGMT. 123 (2012); Toshi H. Arimura et al., *Is a Voluntary Approach an Effective Environmental Policy Instrument? A Case for Environmental Management Systems*, 55 J. ENV'T ECON. & MGMT. 281 (2008); Dennis Rondinelli & Gyula Vastag, *Panacea, Common Sense, or Just a Label? The Value of ISO 14001 Environmental Management Systems*, 18 EUR. MGMT. J. 499 (2000); RICHARD N.L. ANDREWS ET AL., DEP'T OF PUBLIC POL'Y, UNIV. OF NORTH CAROLINA AT CHAPEL HILL, *ENVIRONMENTAL MANAGEMENT SYSTEMS: DO THEY IMPROVE PERFORMANCE?*, PROJECT FINAL REPORT: VOL. II, at 285 (2003); Oren Perez et al., *The Dynamic of Corporate Self-Regulation: ISO 14001, Environmental Commitment, and Organizational Citizenship Behavior*, 43 LAW & SOC'Y REV. 593 (2009); Vera Ferrón Vélchez, *The Dark Side of ISO 14001: The Symbolic Environmental Behavior*, 23 EUR. RES. MGMT. & BUS. ECON. 33 (2017).

70. See generally Jonathan C. Borck & Cary Coglianese, *The Effectiveness of Voluntary Environmental Programs*, 34 ANN. REV. ENV'T & RES. 305, 311, 316 (2009).

71. ASEEM PRAKASH & MATTHEW POTOSKI, *THE VOLUNTARY ENVIRONMENTALISTS: GREEN CLUBS, ISO 14001, AND VOLUNTARY ENVIRONMENTAL REGULATIONS* (2006).

72. *Id.* at 148, 156–64.

73. *Id.* at 150–52.

they find that ISO-certified facilities do a statistically significant better job than other facilities in terms of time spent in compliance with environmental regulations and in terms of reductions in reported toxic releases, Prakash and Potoski can be reasonably assured that their results are real. And yet, while their results are statistically significant, these results are also substantively underwhelming. After controlling for other factors, Prakash and Potoski find that, compared with facilities without an ISO-certified EMS, certified “facilities spent on average one week less time out of compliance with government regulation.”<sup>74</sup> In terms of toxic emissions, Prakash and Potoski’s results are self-admittedly “difficult to interpret,” but they also acknowledge that at best what they find “is not a very large improvement difference.”<sup>75</sup> If toxic emissions are normally distributed across all firms, Prakash and Potoski’s analysis shows that ISO-certified facilities perform at most only about three percentiles better than noncertified facilities.<sup>76</sup>

## II. SUSTAINABLE FORESTRY PRACTICES

Standards for sustainable forestry practices are another prominent example of soft law related to environmental protection. As with EMSs, for which there have existed multiple soft law standards (e.g., EMAS and the British standard, in addition to the dominant ISO 14001 paradigm), forest managers in the timber industry have multiple options from which to choose if they wish to follow soft law. Around the world, dozens of voluntary forest sustainability standards and standard-setting bodies exist.<sup>77</sup> In this Part, the focus is on the two main non-governmental forestry standards applicable within the United States: (1) the Forest Stewardship Council (FSC), an international organization that runs a sustainable forestry certification system initially launched by the World Wildlife Fund but which now comprises both industry groups and other environmental organizations as members, and (2) the Sustainable Forestry Initiative (SFI),

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74. *Id.* at 166.

75. *Id.* at 165–66.

76. Cary Coglianese, *Book Review*, 42 LAW & SOC’Y. REV. 932, 933 (2008). Moreover, the modest regulatory compliance improvements might have come about merely from firms doing a better job at handling paperwork requirements, not by actually improving substantive environmental performance. *Id.* With respect to toxic pollution, the data on this measure are self-reported, so any slight improvement in these numbers might have come about simply from better internal accounting. *Id.* Improvement in both internal accounting and paperwork handling are precisely the kind of effects that a process-based EMS could be expected to deliver—but they are different than making tangible improvements in environmental quality.

77. *Sustainable Forest Management (SFM) Toolbox*, FOOD & AGRIC. ORG. UNITED NATIONS, <http://www.fao.org/sustainable-forest-management/toolbox/modules/forest-certification/in-more-depth/en/> [<https://perma.cc/SA9C-VGGB>] (“Today, there are more than 50 certification schemes addressing a wide variety of forest types, tenure and management regimes.”). For an overview of the certification approach to forest management, see Graeme Auld et al., *Certification Schemes and the Impacts on Forests and Forestry*, 33 ANN. REV. ENV’T RES. 187 (2008).

a program initially created by the American Forest & Paper Association (an industry trade association).<sup>78</sup>

Both of these programs emerged in the mid-1990s following international recognition of the need for greater attention to sustainable forest management—particularly for the preservation of rainforests around the world. Sustainable forestry was a major concern expressed at the United Nations conference on environment in Rio De Janeiro in 1992, the same meeting that helped to spur interest in EMSs. But no binding international agreement related to sustainable forestry could be reached at the Rio summit. Instead, nations agreed to a nonbinding “Statement of Principles on Forests” that generally encouraged countries to do a better job of monitoring and managing the conservation of their forest resources.<sup>79</sup> Furthermore, in the years following the summit, nations met in what has come to be known as the Montréal Process.<sup>80</sup> This process catalyzed the development of criteria and indicators that are now widely accepted as the basis for evaluating the health of forests around the world, although no binding international standards exist that mandate the attainment of any particular level on these criteria or indicators.<sup>81</sup>

Some countries have established hard law requirements related to forest management, but a large number of countries, especially in the developing world, still lack a viable hard law-based governance infrastructure for forest management. This is also largely the case for many forested lands in the United States. Although forestry practices on many public lands must comply with various federal statutes and regulations related to multiuse management, only 31 percent of the United States’ forestlands are owned by the federal government and thus are subject to these hard law requirements.<sup>82</sup>

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78. Although SFI focuses on forests in the United States and Canada, FSC is a major global forest certification system as well. Another major global forest certification is the Programme for the Endorsement of Forest Certification (PEFC), which originated in 1998 as a system known as Pan-European Forest Certification but has since expanded well beyond Europe. *See* Auld et al., *supra* note 77, at 191. *See generally* PROGRAMME FOR ENDORSEMENT FOREST CERTIFICATION, <https://www.pefc.org/> [<https://perma.cc/ZX4Q-CR JW>]. SFI has been endorsed by PEFC and is a member of its global alliance of certification systems. *See Sustainable Forestry Initiative (SFI)*, PROGRAMME FOR ENDORSEMENT FOREST CERTIFICATION, <https://pefc.org/discover-pefc/our-pefc-members/national-members/sustainable-forestry-initiative-sfi> [<https://perma.cc/KZ59-HQ QX>].

79. *United Nations Conference on Environment and Development: Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests*, 31 INT’L LEGAL MATERIALS 881–87 (1992).

80. *Montréal Process*, U.S. FOREST SERV., <https://www.fs.fed.us/research/sustain/montreal-process.php> [<https://perma.cc/285H-H34H>].

81. *See, e.g., About Us*, MONTREAL PROCESS, [https://www.montrealprocess.org/The\\_Montreal\\_Process/About\\_Us/index.shtml](https://www.montrealprocess.org/The_Montreal_Process/About_Us/index.shtml) [<https://perma.cc/8AHB-VZ7K>].

82. *National Woodland Owner Survey*, U.S. FOREST SERV., <https://www.fia.fs.fed.us/nwos/> [<https://perma.cc/2E8C-NR39>]; *see also* FS Directive 979, National Report on Sustainable Forests—2010 (U.S.D.A. 2011), <https://www.fs.fed.us/research/sustain/docs/national-reports/2010/2010-sustainability-report.pdf> [<https://perma.cc/2DFT-MQFR>]. The remaining forestlands—owned by individuals, corporations, states, municipalities, and tribal governments—are not subject to these federal forest management requirements. After all, the National Forest Management Act, as its very name indicates, applies only to “units of federally owned forest, range, and related lands throughout the United States and its territories.” 16 U.S.C §§ 1608–1609. Of course, even though federal forest

As concern about forest sustainability has grown, especially due to climate change, some consumers of wood and paper products have started to demand products that have been sustainably harvested. The absence of hard law related to forest management in developing countries and over large portions of forests in developed countries such as the United States has led to increased interest in soft law methods of governing forest management. SFI and FSC emerged within this milieu.<sup>83</sup> Both of these soft law programs allow forest product manufacturers to display a certification label on those products that derive from forests managed in a manner that meets the relevant voluntary standards.<sup>84</sup>

As will be evident, both sets of standards have considerable commonalities, but a brief distillation of these two initiatives and their specific standards helps to showcase additional ways that soft law has emerged to address environmental concerns. This Part concludes with a discussion of what can be said about the impact of FSC and SFI on the sustainability of forest resources in the United States and globally.

### **A. Forest Stewardship Council**

The Forest Stewardship Council (FSC) is the most widely adopted forest certification system in the world. Established in 1993 by the World Wildlife Fund and other organizations out of concern for rampant deforestation, FSC is now an independent voluntary program that sets standards for responsible forest management around the world.<sup>85</sup> Its standards are developed to address the following ten principles or objectives:<sup>86</sup>

1. Compliance with laws and FSC principles;
2. Tenure and use rights and responsibilities;
3. Indigenous peoples' rights;
4. Community relations and workers' rights;
5. Benefits from the forest;

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management rules do not apply to state and local forests, many (but not all) states do have their own laws for managing their public forests. *See, e.g.*, DEFENDERS OF WILDLIFE, STATE FORESTRY LAWS (2000), [https://defenders.org/sites/default/files/publications/state\\_forestry\\_laws.pdf](https://defenders.org/sites/default/files/publications/state_forestry_laws.pdf) [<https://perma.cc/R26X-KN9D>]. Even so, more than half of forestlands in the United States—57 percent—are owned by private individuals or entities not subject to any systemic, hard forest management requirements. *See National Woodland Owner Survey, supra*.

83. *See generally* Errol E. Meidinger, *The New Environmental Law: Forest Certification*, 10 BUFF. ENV'T L. J. 211 (2002).

84. *See generally id.*

85. *Our History*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/who-we-are/our-history> [<https://perma.cc/M5F3-HLYX>]. *See generally* BENJAMIN CASHORE ET AL., GOVERNING THROUGH MARKETS: FOREST CERTIFICATION AND THE EMERGENCE OF NON-STATE AUTHORITY (2004).

86. *Mission and Vision*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/what-we-do/mission-and-vision> [<https://perma.cc/BS4Z-W5MD>] [hereinafter *Mission and Vision*]. The listed principles provided in the text of this Article are taken verbatim from FSC's headings for each principle. Each heading is then followed by a short elaboration of the applicable principle. For example, the heading for Principle 4, on community relations and workers' rights, is followed with this statement: "Forest management operations shall maintain or enhance the long-term social and economic well being of forest workers and local communities." *Id.*



6. Environmental impact;
7. Management plan;
8. Monitoring and assessment;
9. Maintenance of high conservation value forests; and
10. Plantations.

Addressing these topics, FSC sets out standards for both forest management certification and chain-of-custody certification—the latter to ensure that products sold with the FSC certification label were indeed sourced with products from forests that hold an FSC management certification.<sup>87</sup>

To obtain certification in either forest management or chain of custody, forest managers must show that their operations adhere to FSC's global principles and to the standards that give more specific meaning to these principles.<sup>88</sup> Details of FSC's standards can vary somewhat regionally based on variation in forest conditions and needs in different parts of the world, but they all address each of the ten principles listed above.<sup>89</sup> For each principle, standards specify both *criteria* for conformity and *indicators* of that conformity.<sup>90</sup>

The FSC forest management standard for the United States, for example, elaborates FSC's Principle 4, on community relations and workers' rights, with five "criteria," each of which specify the principle in greater detail.<sup>91</sup> The second of the Principle 4 criteria, for instance, states that "[f]orest management should meet or exceed all applicable laws and/or regulations covering health and safety of employees and their families."<sup>92</sup> Each criterion is then followed by one or more indicators against which conformity with the applicable criterion can be assessed. For example, the second criterion for Principle 4 is followed by three indicators, one of which holds that "[t]he forest owner or manager and their employees and contractors demonstrate a safe work environment. Contracts or other written agreements include safety requirements."<sup>93</sup>

As this example from the U.S. version of the FSC standard indicates, some of FSC's principles, criteria, and indicators weave soft law together with hard

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87. See generally *Certification*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/certification> [https://perma.cc/P3C9-DW9Q].

88. See, e.g., *Become Certified*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/certification/become-certified> [https://perma.cc/UCM8-MQ8D]; U.S. FOREST STEWARDSHIP COUNCIL, FSC-STD-01-001 V5-2 EN, FSC PRINCIPLES AND CRITERIA FOR FOREST STEWARDSHIP 9 (2015).

89. FSC's standards for individual countries can be found by using the search tool at *Document Centre*, FOREST STEWARDSHIP COUNCIL, <https://fsc.org/en/document-centre> [https://perma.cc/W465-ZLRP]. Even within individual countries, regional variation is allowed for different types of forest ecosystems.

90. On the general structure of FSC's standards and auditing for compliance, see Steven Bernstein & Benjamin Cashore, *Non-State Global Governance: Is Forest Certification a Legitimate Alternative to a Global Forest Convention?*, in *HARD CHOICES, SOFT LAW: VOLUNTARY STANDARDS IN GLOBAL TRADE, ENVIRONMENT AND SOCIAL GOVERNANCE* 33, 39 (John J. Kirtan & Michael J. Trebilcock eds. 2004).

91. U.S. FOREST STEWARDSHIP COUNCIL, FSC-US FOREST MANAGEMENT STANDARD (V1.0), at 14–18 (2010).

92. *Id.* at 18.

93. *Id.*

law. FSC's very first principle—compliance—does so quite explicitly. That principle is, in turn, elaborated by six criteria and a total of ten indicators, each of which aim at compliance with hard law.<sup>94</sup> One criterion for compliance, for instance, calls for forest managers to “respect” all applicable laws.<sup>95</sup> That criterion of respect is given more specific meaning with indicators that call for forest managers to develop plans that demonstrate compliance<sup>96</sup> and to train employees and contractors in applicable laws.<sup>97</sup>

Other FSC principles, criteria, and indicators, of course, have much less direct connection with hard law. For example, Principle 7 on management plans states: “A management plan—appropriate to the scale and intensity of the operations—shall be written, implemented, and kept up to date. The long-term objectives of management, and the means of achieving them, shall be clearly stated.”<sup>98</sup> This principle is followed by numerous, more concrete criteria and indicators describing what exactly should be included in a management plan—such as an indication that it will be regularly updated, a specification that employees will receive adequate training to implement a forest's management plan, and an intention to make a summary of the plan publicly available.<sup>99</sup>

The FSC does not make the determination itself to issue certificates. Instead, it accredits independent certification bodies that carry out the assessments that lead to FSC certification.<sup>100</sup> Certification means that a specific forest or forest products business has complied with FSC standards. FSC makes the claim that it is “the only global forest certification system to have an integrated accreditation program that systematically checks its certification bodies.”<sup>101</sup> Toward this end, FSC has established a process for checking annually on accredited certification bodies. Of course, decisions about the selection and re-numeration of the accrediting body are ultimately made by the forest businesses seeking certification.

FSC's standards derive from a process driven by its membership, which falls into the following three categories:

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94. *Id.* at 7–10.

95. *Id.* at 7.

96. *Id.*

97. *Id.*

98. *Id.* at 59.

99. *Id.* at 59–69. *See generally* U.S. FOREST STEWARDSHIP COUNCIL, HOW FSC FOREST MANAGEMENT DIFFERS FROM STANDARD PLANS (2011), <https://us.fsc.org/preview.how-fsc-forest-management-differs-from-standard-plans.a-318.pdf> [<https://perma.cc/5K8H-E3CQ>].

100. *Certification Body Accreditation*, U.S. FOREST STEWARDSHIP COUNCIL, <https://fsc.org/en/page/certification-body-accreditation> [<https://perma.cc/D2EW-3PHK>]. Currently, there are about a dozen accredited certifiers for forests in the United States. *Certifying Bodies in the US*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/certification/certifying-bodies-in-the-us> [<https://perma.cc/EV9U-BX92>].

101. *Certification Body Accreditation*, *supra* note 100. In addition, certifications for businesses and accreditation for certification bodies can be suspended if audits or assessments reveal that FSC principles are not being met. *Id.*

- *Economic*: “forestry firms, secondary processors and retailers, auditing organizations, and consultants;”<sup>102</sup>
- *Social*: “civil society groups and individuals who represent community development, poverty, and human and worker rights organizations;”<sup>103</sup> and
- *Environmental*: environmental advocacy groups.<sup>104</sup>

Groups in each category form a “chamber,” and FSC ensures that it also has representation from the global North and South within each chamber.<sup>105</sup> Membership and voting rights are organized with the aim of ensuring “equal weight of vote and influence for the different interest groups as well as for different parts of the world and economic power.”<sup>106</sup> FSC operates with an active Board of Directors comprising twelve members elected from each sub-chamber of the General Assembly.<sup>107</sup> A Director General runs day-to-day operations and is accountable to a Board of Directors.<sup>108</sup> FSC elects its Board through votes of a General Assembly that meets every three years and uses a voting process that ensures equality among each of the three main groups.<sup>109</sup>

Standards must ultimately be approved by the Board of Directors, but only after a lengthy process that begins with drafting efforts performed by a standards development group comprising members from all three chambers along with various technical experts.<sup>110</sup> Draft standards are then subjected to a consultative process, including notice and comment.<sup>111</sup> They may also be subjected to appropriate field testing and independent auditing.<sup>112</sup> Only after consultation and any testing will a final report be submitted to a designated FSC Policy and Standards Unit for formal approval by the FSC Board of Directors.<sup>113</sup> Even after they are approved, standards are subject to the possibility of petitions for change and review.<sup>114</sup> FSC’s principles, and its various criteria and indicators for forest

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102. Christine Overdevest, *Codes of Conduct and Standard Setting in the Forest Sector—Constructing Markets for Democracy?*, 59 RELS. INDUSTRIELLES 172, 179 (2004).

103. *Id.* at 179–80.

104. *Id.* at 180.

105. *Membership Chambers*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/who-we-are/membership/membership-chambers> [<https://perma.cc/T2QB-A7YE>].

106. *Id.*

107. *Strategic Plan & Governance Structure*, FOREST STEWARDSHIP COUNCIL, <https://www.fsc.org/en/governance-strategy> [<https://perma.cc/TMS9-9QVP>].

108. *Governance*, U.K. FOREST STEWARDSHIP COUNCIL, <https://www.fsc-uk.org/en-uk/about-fsc/who-is-fsc/governance> [<https://perma.cc/3GKM-D7QF>].

109. *Governance*, U.S. FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/who-we-are/governance> [<https://perma.cc/TSQ7-L37M>].

110. *See generally* U.S. FOREST STEWARDSHIP COUNCIL, FSC-PRO-01-001 V3-1 EN, THE DEVELOPMENT AND REVISION OF FSC NORMATIVE DOCUMENTS (2015).

111. *See id.* §§ 3.14–3.16, 5.1–5.13, at 13–15.

112. *See id.* § 6, at 15 (citing FOREST STEWARDSHIP COUNCIL, FSC-POL-01-001, FSC POLICY FOR PILOT TESTS OF DRAFT FSC STANDARDS (2004)); *Certification Bodies’/Certificate Holders’ Transparency*, FOREST STEWARDSHIP COUNCIL, <https://fsc.org/en/transparency-certification-bodies-certificate-holders> [<https://perma.cc/H36A-TYSX>].

113. *See* U.S. FOREST STEWARDSHIP COUNCIL, *supra* note 110, § 10, at 18–19.

114. *See id.* § 19, at 23.

stewardship, formally undergo review and potential revision on a five-year cycle.<sup>115</sup>

## **B. Sustainable Forestry Initiative (SFI)**

The American Forest & Paper Association (AFPA) launched the Sustainable Forestry Initiative (SFI) in 1995 as “a voluntary code of conduct for the members” of the trade association.<sup>116</sup> By 1998, the program was opened to forests owned by individuals or entities that were not part of AFPA.<sup>117</sup> By 2000, responsibility for the program shifted entirely to an independent nonprofit organization, where it now resides.<sup>118</sup> Unlike FSC, which is a global certification program with regional variation in standards, SFI is a certification program aimed specifically at forests in Canada and the United States.<sup>119</sup>

SFI standards fall into four categories: forest management; fiber sourcing; chain of custody; and on-product labels.<sup>120</sup> Each type of standard begins with a common set of principles, such as: sustainable forestry; forest productivity and health; water quality protection; biodiversity; aesthetics and recreation; legal compliance; community engagement and social responsibility; transparency; and continuous improvement.<sup>121</sup> Much as with FSC, these general principles are then elaborated in greater detail with steps to take to fulfill each principle.<sup>122</sup> For example, with SFI’s forest management standard, the principles are followed by 15 objectives (e.g., forest management planning, forest health and productivity, legal and regulatory compliance), each of which are followed by a set of more concrete indicators.<sup>123</sup> Overall, the forest management standard bears much affinity with the plan-do-check-act structure of an ISO-certified EMS, although applied to forest management. It is generally thought that the SFI’s standards provide forest managers with greater flexibility than do the FSC standards, the latter being commonly described as more prescriptive than SFI’s standards.<sup>124</sup>

SFI’s standards are reviewed every five years and updated as needed through a process that begins with an external review panel comprising outside

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115. U.S. FOREST STEWARDSHIP COUNCIL, *supra* note 88, at 4.

116. R. Neil Sampson, *The Sustainable Forestry Initiative Program: Seven Years of Sustainable Forestry*, FOOD & AGRIC. ORG. UNITED NATIONS, <http://www.fao.org/3/XII/0700-A1.htm> [<https://perma.cc/KGL3-87VQ>].

117. *Id.*

118. *Id.*

119. *Id.*

120. *Introduction to SUSTAINABLE FORESTRY INITIATIVE, SFI 2015–2019 STANDARDS AND RULES* (2015) 1–2, [https://forests.org/wp-content/uploads/2015\\_2019StandardsandRules\\_web\\_Feb\\_2017.pdf](https://forests.org/wp-content/uploads/2015_2019StandardsandRules_web_Feb_2017.pdf) [<https://perma.cc/LZY6-57K9>].

121. *Id.*

122. *Id.*

123. *SFI 2015-2019 Forest Management Standard*, in *SUSTAINABLE FORESTRY INITIATIVE*, *supra* note 120, at 1.

124. *See, e.g.*, CONG. RES. SERV., R41992, *FOREST CERTIFICATION PROGRAMS 2* (2011), <https://crsreports.congress.gov/product/pdf/R/R41992/6> [<https://perma.cc/ZN63-YLYU>]. (“The SFI standard is generally more flexible, while the FSC standard is generally more prescriptive with more on-the-ground performance requirements.”).

experts from the public and private sectors and from academe.<sup>125</sup> Public comments are elicited, as the review process is announced on the SFI's website and communicated to various stakeholders identified by the SFI.<sup>126</sup> Standard setting includes a public review process and recommendations from multi-stakeholder committees and revision workshops in North America.<sup>127</sup>

As with FSC, the process of certification relies on a third-party audit from an accredited organization.<sup>128</sup> Currently about seven accredited certifiers exist that can audit conformity with SFI's forest management standards, and four certifiers can audit its chain of custody standard.<sup>129</sup> Forest owners or product companies seeking certification identify and compensate their auditor.<sup>130</sup>

### C. Efficacy of Forest Certification Programs

An initial way to consider the impact of forest certification programs is to look at how much forested land has been certified. In the United States, roughly 35 million acres of land were certified under FSC's U.S. program in 2018.<sup>131</sup> This may sound like a great deal of land but, to put this figure in perspective, consider that the United States has about 800 million acres of overall forested land, upwards of about 60 percent of which is privately owned.<sup>132</sup> This means that no more than about 8 percent of all private forests in the United States are certified under the FSC program.<sup>133</sup>

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125. *Introduction to SUSTAINABLE FORESTRY INITIATIVE*, *supra* note 120, at 1.

126. *SFI Standards Development and Interpretations Process*, in *SUSTAINABLE FORESTRY INITIATIVE*, *supra* note 120, at 3.

127. *Id.*

128. *Introduction to SUSTAINABLE FORESTRY INITIATIVE*, *supra* note 120, at 1.

129. *Id.* at 3.

130. *SUSTAINABLE FORESTRY INITIATIVE, HOW TO CERTIFY TO THE SFI STANDARDS 2* (Dec. 2017), [https://forests.org/wp-content/uploads/HowtoCertify\\_SFI\\_Dec1.pdf](https://forests.org/wp-content/uploads/HowtoCertify_SFI_Dec1.pdf) [<https://perma.cc/N435-BSHJ>].

131. *Facts & Figures*, FOREST STEWARDSHIP COUNCIL, <https://us.fsc.org/en-us/what-we-do/facts-figures> [<https://web.archive.org/web/20180825102005/https://us.fsc.org/en-us/what-we-do/facts-figures>]. For one gauge of the rate of growth in land covered by an FSC certification, consider that in 2011, 33 million acres were under certified management. CONG. RES. SERV., *supra* note 124, at 3 (2011).

132. *National Woodland Owner Survey*, *supra* note 82. This survey is the latest sustainable forest report issued by the federal government.

133. The percentage of forests under certified management is a relevant measure because it focuses on the ultimate problem that FSC aims to solve: the degradation or elimination of forested lands. CARY COGLIANESE, *MEASURING REGULATORY PERFORMANCE: EVALUATING THE IMPACT OF REGULATION AND REGULATORY POLICY* (2012), [https://www.oecd.org/gov/regulatory-policy/1\\_coglianesse%20web.pdf](https://www.oecd.org/gov/regulatory-policy/1_coglianesse%20web.pdf) [<https://perma.cc/3U2D-476N>]. See generally Auld et al., *supra* note 77, at 188 (indicating that measures of “effectiveness of forest certification [focusing on] the degree to which [it] modifies on-the-ground practices in ways that are likely to reverse or alleviate environmental deterioration and socioeconomic harm resulting from forestry” are ones that are “commonly used” and “appropriate”). It is conceivable, of course, to consider how well FSC is faring earlier in the causal chain—such as how much the furniture industry is selling products with wood harvested from sustainable forests. The Sustainable Furnishings Council (SFC) has partnered with the National Wildlife Federation (NWF) to produce a scorecard of furniture companies' efforts to undertake actions to promote the use of recycled wood and wood from FSC-certified forests. *Wood Furniture Scorecard 2019*, SUSTAINABLE FURNISHINGS COUNCIL, <https://furniturecorecard.nwf>.

When considered from a global perspective, about 500 million acres of forested land across 82 countries are certified through FSC.<sup>134</sup> Yet, overall the planet has about 11 billion acres of forested land—meaning that FSC-certified forests make up no more than 5 percent of the world’s forests.<sup>135</sup>

Of the total acres certified under FSC globally, 51 percent are located in Europe, while 33 percent can be found in North America.<sup>136</sup> The U.S. share makes up roughly 21 percent of all certified forests in North America and about 7 percent of the total certified worldwide.<sup>137</sup>

According to SFI’s latest annual report, the percentage of North American forested land falling under its certification is somewhat greater: 364 million acres throughout the United States and Canada.<sup>138</sup> Compared with a combined 1.6 billion acres of forests overall in the United States and Canada, SFI’s coverage amounts to about 20 percent of total forested land.<sup>139</sup> SFI’s recent reports do not break down the program’s coverage separately for the United States versus Canada, so it is not possible to discern exactly how much forest in each

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org/wood-furniture-scorecard-2019 [https://perma.cc/2JK4-PNHS]. Of the 82 furniture companies listed in the 2019 scorecard, 62 percent do not even achieve an honorable mention—that is, 5 points out of total of 26 points. On the other hand, 21 companies are considered top scorers, while 10 have received honorable mentions. But keep in mind that companies with even 12 points—or less than 50% of the points possible—count as “top scorers.” Those having earned 5–11 points receive an “honorable mention.” *Id.* Although the scorecard does not assign market share to each company, it would at least appear that most companies in the furniture industry are not pushing the envelope in terms of sustainability.

134. See *FSC Facts & Figures*, U.S. FOREST STEWARDSHIP COUNCIL (Nov. 21, 2019), [https://fsc.org/sites/fsc.org/files/2019-11/Facts\\_and\\_Figures\\_2019-11-21.pdf#viewer.action=download](https://fsc.org/sites/fsc.org/files/2019-11/Facts_and_Figures_2019-11-21.pdf#viewer.action=download) [https://perma.cc/93NX-8VE7]; see also FSC, FSC ANNUAL REPORT 2019, at 40 (2019) [hereinafter FSC ANNUAL REPORT], <https://fsc.org/sites/default/files/2020-11/FSC%20ANNUAL%20REPORT%202019%20ENGLISH%20web.pdf> [https://perma.cc/NFR9-KAW7].

135. *The State of the World’s Forests*, FOOD & AGRIC. ORG. UNITED NATIONS FOOD & AGRIC., <http://www.fao.org/state-of-forests/en/> [https://perma.cc/5Y56-NV5H]. See generally ORG. OF THE UNITED NATIONS, THE STATE OF THE WORLD’S FORESTS: FOREST PATHWAYS TO SUSTAINABLE DEVELOPMENT (2018) [hereinafter FAO 2018 REPORT], <http://www.fao.org/documents/card/en/c/19535EN> (follow “Download” hyperlink).

136. FSC ANNUAL REPORT, *supra* note 134, at 40. The annual report lists forest area in terms of hectares; one hectare equals 2.47 acres.

137. Approximately 164 million acres of North America forestlands are FSC-certified. *Id.* Incidentally, if one considers FSC’s reach in terms of the number of owners of land who have obtained certification, FSC’s penetration is dramatically smaller. The total number of FSC certifications that have been issued globally is about 1,700, with about 40,000 chain-of-custody certificates. *Id.* at 40–41. By way of comparison, consider that in the United States there are about 11 million owners of forest land alone; almost all of these are family owners, but 1 million are commercial owners. See U.S. FOREST SERV., WHO OWNS AMERICA’S FORESTS? FOREST OWNERSHIP PATTERNS AND FAMILY FOREST HIGHLIGHTS FROM THE NATIONAL WOODLAND OWNER SURVEY 2–3 (2008), <https://www.nrs.fs.fed.us/pubs/inf/NRS-INF-06-08.pdf> [https://perma.cc/LU3K-JU73].

138. SUSTAINABLE FORESTRY INITIATIVE, FORESTS OF OPPORTUNITY 13 (2019), [https://www.sfi-program.org/wp-content/uploads/SFI-ProgressReport-2019\\_Final.pdf](https://www.sfi-program.org/wp-content/uploads/SFI-ProgressReport-2019_Final.pdf) [https://perma.cc/7B7A-BJYY].

139. For the acreage of forested land in the United States and Canada, see FOOD & AGRIC. ORG. UNITED NATIONS FOOD & AGRIC., GLOBAL FOREST RESOURCES ASSESSMENT 2020: KEY FINDINGS 1 (2020), <http://www.fao.org/3/CA8753EN/CA8753EN.pdf> [https://perma.cc/Y5MS-HQTZ].

country is covered by current levels of SFI certification. However, it has previously been reported that SFI certification covers only 7.7 percent of U.S. forested land.<sup>140</sup>

As some forests can be certified under more than one system, political scientist Lars Gulbrandsen has adjusted for such dual-certified forests.<sup>141</sup> He estimates that roughly 11 percent of the world's forests fall under at least one form of sustainable forest management certification.<sup>142</sup>

Of course, not all forested land is used for timber harvesting or other industrial purposes. The U.N. Food and Agriculture Organization (FAO) views “the forest industry” overall as having “made significant progress in improving sustainability over the last years, and use of products from sustainably-managed forests is increasing.”<sup>143</sup> The FAO notes that “[i]n 2017 the annual volume of wood harvested in FSC-certified forests . . . corresponded to 23 percent of the total volume of global industrial roundwood production and 11 percent of global roundwood production (including fuelwood).”<sup>144</sup> According to a global alliance known as the Program for the Endorsement of Forest Certification (PEFC)—which effectively certifies national forestry certification programs—the total amount of industrial wood production that is covered either by FSC certification or another PEFC-endorsed certification amounts to 38 percent.<sup>145</sup> A survey of hardwood lumber manufacturers in the United States revealed that no more than about 29 percent had received chain-of-custody certification—and these were about evenly split between FSC and SFI.<sup>146</sup>

As with ISO 14001, some empirical studies have attempted to answer key questions about the impact of forest certification systems: Do forests managed under certified systems actually fare better than those not under certification? If so, has the existence of a certification system caused the improvements? Survey research does indicate that forests that meet certification standards are self-reported to be managed in a more rigorous and environmentally conscientious manner.<sup>147</sup> Nevertheless, as legal scholar Errol Meidinger has observed, “we do

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140. Omar Espinoza et al., *Forest Certification and Green Building Standards: Overview and Use in the U.S. Hardwood Industry*, 33 J. CLEANER PROD. 30, 33 tbl.2 (2012). Of the SFI certified lands in the United States, 30% are owned by fifteen states. SUSTAINABLE FORESTRY INITIATIVE, *supra* note 138.

141. See Lars H. Gulbrandsen, *Public Sector Engagement with Private Governance Programmes: Interactions and Evolutionary Effects in Forest and Fisheries Certification*, in SMART MIXES FOR TRANSBOUNDARY ENVIRONMENTAL HARM 211, 221 (Judith van Erp et al. eds., 2019).

142. *Id.*

143. FAO 2018 REPORT, *supra* note 135, at 50.

144. *Id.*

145. *Id.*

146. Espinoza et al., *supra* note 140, at 37.

147. See, e.g., Zuzana Burivalova et al., *A Critical Comparison of Conventional, Certified, and Community Management of Tropical Forests for Timber in Terms of Environmental, Economic, and Social Variables*, 10 CONSERVATION LETTERS 4 (2017); Susan E. Moore et al., *Impacts of Forest Stewardship Council (FSC) and Sustainable Forestry Initiative (SFI) Forest Certification in North America*, 110 J. FORESTRY 79, 80 (2012).

not have and are not likely to get anything approximating scientifically persuasive information on the efficacy of forest certification programs.”<sup>148</sup> The same sorts of challenges that exist with respect to evaluating EMS standards exist with respect to forest standards.<sup>149</sup> As the standards are nonbinding, the forest companies that adopt certified forest management practices may well be unlike other actors. Indeed, they could well be the very companies that would manage their forests more responsibly even in the absence of a certification system.

Another potential limitation in the impact of forestry certification appears to be the tendency for its use most frequently in those parts of the world with less intense pressures for deforestation—or at least where such pressures stem mainly from the use of timber for the sale of wood and paper products, rather than other sources of deforestation, such as agriculture. FSC forest management certification is simply not present in many countries with significant rates of deforestation; after all, less than half of the countries in the world have any FSC-certified land.<sup>150</sup> Social scientists Axel Marx and Dieter Cuypers have found that “certification is neither a necessary nor a sufficient condition for halting deforestation in a given country.”<sup>151</sup> In many parts of the world, after all, deforestation stems from a desire to clear land for agricultural use, not for the sale of timber—making the entire certification mechanism simply ill fitted for a major source of global deforestation.

The upshot appears to be that, while forest management certification may be better than nothing, or at least not harmful, it does not seem to be a major force for preserving forest resources around the world. Political scientist Lars Gulbranden concludes his book-length study of voluntary certification systems by observing that, “[o]n balance, although certification seems to change *some* management practices and create better environmental outcomes in *some* cases, it does not seem to be an effective environmental institution in the sense of addressing some of the most serious environmental challenges in the forest and fisheries sectors.”<sup>152</sup>

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148. Meidinger, *supra* note 83; see also Auld et al., *supra* note 77; Zuzana Burivalova et al., *What Works in Tropical Forest Conservation, and What Does Not: Effectiveness of Four Strategies in Terms of Environmental, Social, and Economic Outcomes*, CONSERVATION SCI. & PRAC., June 2019, art. no. e28, at 1 (2019). Burivalova and her coauthors note:

The main roadblocks in understanding the effectiveness of different types of [forest] conservation strategies are rooted in the complexity of the socio-economic systems in which conservation is implemented, imperfect implementation of conservation measures, lack of funding for appropriate evaluation, and the near impossibility of doing true experiments (because of large scale and complex conditions), among others.

See *id.* at 2.

149. See *supra* notes 67–68, 70 and accompanying text.

150. See *Facts & Figures*, FOREST STEWARDSHIP COUNCIL, <https://www.fsc.org/en/facts-figures> [<http://perma.cc/3JR6-US2F>].

151. Axel Marx & Dieter Cuypers, *Forest Certification as a Global Environmental Governance Tool: What Is the Macro-Effectiveness of the Forest Stewardship Council?*, 4 REGUL. & GOVERNANCE 408, 416 (2010).

152. LARS H. GULBRANDSEN, TRANSNATIONAL ENVIRONMENTAL GOVERNANCE: THE EMERGENCE AND EFFECTS OF THE CERTIFICATION OF FORESTS AND FISHERIES 180 (2010); see also Allen Blackman et al., *Does Eco-Certification Stem Tropical Deforestation?* *Forest Stewardship*



### III. GREEN BUILDING DESIGN

Most people spend the majority of their days in buildings, making buildings a major source of society's energy consumption (an estimated 30 to 40 percent) and an important factor affecting individual health.<sup>153</sup> Yet, even though the federal government has many hard law regulations designed to address the outdoor environment and major consumer products (e.g., automobiles), no comprehensive set of federal regulations applies to the built environment. For the last twenty years, however, an important source of soft law has emerged: Leadership in Energy and Environmental Design (LEED) certification of "green building" design.<sup>154</sup> LEED certification entails a ranking system according to which buildings can be designated a level (certified, silver, gold, or platinum) based on whether they meet certain green building criteria.<sup>155</sup> LEED standards are established by, and the certification is administered through, the U.S. Green Building Council (USGBC)—a nonprofit membership organization headquartered in Washington, D.C.<sup>156</sup> Members include building developers, homeowners, and city planners.<sup>157</sup> Buildings that receive LEED certification can display a special logo in the building indicating the level of attainment.<sup>158</sup>

USGBC first created LEED in 1998, beginning with 19 pilot projects.<sup>159</sup> The program originally focused just on the commercial building sector.<sup>160</sup> Using

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*Council Certification in Mexico*, 89 J. ENV'T ECON. & MGMT. 306–33 (2018) (failing to find evidence of a reduction in deforestation from certification); Laura Villalobos, Jessica Coria & Anna Nordén, *Has Forest Certification Reduced Forest Degradation in Sweden?* 94 LAND ECON. 220, 220 (2018) (concluding that "certification has not halted forest degradation in that it has not improved any of the environmental outcomes"). Other efforts to synthesize the relevant empirical literature reach similar conclusions. See, e.g., Hamish van der Ven & Benjamin Cashore, *Forest Certification: The Challenge of Measuring Impacts*, 32 CURRENT OP. ENV'T SUSTAINABILITY 104 (2018); Ingrid J. Visseren-Hamakers & Philipp Pattberg, *We Can't See the Forest for the Trees: The Environmental Impact of Global Forest Certification Is Unknown*, 22 GAIA 25 (2013); Claudia Romero et al., *An Overview of Current Knowledge About the Impacts of Forest Management Certification* (Ctr. for Int'l Forestry Rsch., Occasional Paper No. 91, 2013), [http://www.cifor.org/publications/pdf\\_files/OccPapers/OP-91.pdf](http://www.cifor.org/publications/pdf_files/OccPapers/OP-91.pdf) [<https://perma.cc/8D7M-Y9WX>]; Michael Rawson Clark & Joelyn Sarah Kozar, *Comparing Sustainable Forest Management Certifications Standards: A Meta-Analysis*, Ecology & Soc'y, Mar. 2011, art. no. 3, at 1.

153. U.S. DEP'T OF ENERGY, QUADRENNIAL TECHNOLOGY REVIEW: AN ASSESSMENT OF ENERGY TECHNOLOGIES AND RESEARCH OPPORTUNITIES 145, 151 (2015), <https://www.energy.gov/sites/prod/files/2017/03/f34/qtr-2015-chapter5.pdf> [<https://perma.cc/GXF8-UXTH>]; see also *How Much Energy Is Consumed in U.S. Buildings? Frequently Asked Questions*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/tools/faqs/faq.php?id=86&t=1> [<https://perma.cc/XN38-32HU>].

154. *Leadership in Energy & Environmental Design*, LEED, <http://leed.usgbc.org/leed.html> [<https://perma.cc/J8UA-B24K>].

155. *Id.*

156. *Overview*, U.S. GREEN BLDG. COUNCIL, <https://www.usgbc.org/organizations/us-green-building-council> [<https://perma.cc/3ADH-6UH6>].

157. See *Organizations*, U.S. GREEN BLDG. COUNCIL, <https://www.usgbc.org/organizations> [<https://perma.cc/H43B-K4KB>].

158. *Leadership in Energy & Environmental Design*, *supra* note 154.

159. Jacob Kriss, *From a Simple Idea to a Several-Hundred-Billion-Dollar Industry*, U.S. GREEN BLDG. COUNCIL (Feb. 20, 2014), <https://www.usgbc.org/articles/simple-idea-several-hundred-billion-dollar-industry> [<https://perma.cc/HK9G-83MA>].

160. *Id.*

lessons and information from the pilot program, USGBC launched a new version of LEED—LEED 2.0—in March 2001.<sup>161</sup> In 2003, the U.S. General Services Administration began to require that all new federal building projects meet LEED Certified standards.<sup>162</sup> Today, GSA requires all new federal construction projects to meet LEED Gold certification.<sup>163</sup> Many private companies have similarly committed to meeting LEED standards for new construction. LEED also now has green building standards for residential homes.<sup>164</sup>

Although LEED certification originated in the United States and is most popular here, it is now administered around the world.<sup>165</sup> Across both the public and private sectors, 79,000 projects throughout 160 countries and territories have been certified to meet LEED standards.<sup>166</sup> This amounts reportedly to over 15 billion square feet of building space.<sup>167</sup>

As LEED has grown in popularity, USGBC has modified its standards.<sup>168</sup> Using the Environmental Protection Agency's Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts (TRACI) as well as measurement weightings from the National Institute of Standards and Technology, USGBC began to use what it describes as "objective scientific intentions behind the assigned credit values."<sup>169</sup> In 2009, it unveiled new LEED standards,<sup>170</sup> and, in November 2013, it launched its latest version known as LEED v4.<sup>171</sup> This version encourages using products with socially beneficial lifecycles

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161. *Id.*

162. Jacob Kriss, *Part 2: A Green Building Explosion* (2003–2009), U.S. GREEN BLDG. COUNCIL (Feb. 27, 2014), <https://www.usgbc.org/articles/part-2-green-building-explosion-2003-2009> [https://perma.cc/U64D-8G3M].

163. *LEED Building Information*, U.S. GEN. SERVICES ADMIN., <https://www.gsa.gov/real-estate/design-construction/design-excellence/sustainability/sustainable-design/leed-building-information> [https://perma.cc/PZ57-YSDA].

164. USGBC initially launched green building standards for residential homes around 2005. See Jennie Richards, *Green Building: A Retrospective on the History of LEED Certification*, INST. FOR ENV'T ENTREPRENEURSHIP 2 (Sept. 2012), <https://enviroinstitute.org/wp-content/uploads/2012/09/GREEN-BUILDING-A-Retrospective-History-of-LEED-Certification-November-2012.pdf> [https://perma.cc/A7FJ-8SK8]. For information about residential LEED, see *LEED for Residential Design and Construction*, U.S. GREEN BLDG. COUNCIL, <https://www.usgbc.org/leed/rating-systems/residential> [https://perma.cc/GQ85-EQCJ].

165. Sarah Stanley, *U.S. Green Building Council Announces Top 10 Countries and Regions for LEED Green Building*, U.S. GREEN BLDG. COUNCIL (Feb. 13, 2019), <https://www.usgbc.org/articles/us-green-building-council-announces-top-10-countries-and-regions-leed-green-building> [https://perma.cc/VYH2-V5BN]; Alison Gregor, *Two Polar Opposites Cities Take the Lead in Environmental Design*, USGBC+ (Jan./Feb. 2015), <https://plus.usgbc.org/global-leed/> [https://perma.cc/D9ZR-NSZT].

166. See *Leadership in Energy & Environmental Design*, *supra* note 154.

167. *Id.*

168. Kriss, *supra* note 162.

169. *Id.*

170. *Id.*

171. Jacob Kriss, *Part 3: Challenges and Opportunities* (2010–Present), U.S. GREEN BLDG. COUNCIL (Mar. 6, 2014), <https://www.usgbc.org/articles/part-3-challenges-and-opportunities-2010-present> [https://perma.cc/4TXH-YYFE]. See generally Selina Holmes, *Understanding the Changes: LEED 2009 to LEED v4.1*, U.S. GREEN BLDG. COUNCIL (Dec. 21, 2020), <https://www.usgbc.org/articles/understanding-changes-leed-2009-leed-v41> [https://perma.cc/72RX-ZXZ6]. USGBC has

and seeks to reach new markets, such as “data centers, warehouses and distribution centers, hospitality, and midrise residential structures.”<sup>172</sup>

LEED certification is built around standards for nine facets of building design, such as energy consumption and building materials.<sup>173</sup> Certification is based on the accumulation of points for each of these facets.<sup>174</sup> The points are based on specific criteria related to each facet, and these criteria vary for different project types, such as existing buildings, new construction, schools, retail, homes, and healthcare facilities.<sup>175</sup> There are a total of 100 points available and the number of points determines the rating level the project receives: Certified (40–49 points), Silver (50–59 points), Gold (60–79 points), or Platinum (80+ points).<sup>176</sup> In addition to the stated criteria, up to 10 bonus points are possible for “innovation in design, exemplary performance, or achievement of credits identified as having regional importance in a project’s location.”<sup>177</sup>

The criteria or standards for the LEED point system are “[d]eveloped in a transparent, consensus-based process that includes several rounds of public comments and approval from USGBC members.”<sup>178</sup> For these standards to be created, there must be a public comment period and a voting process undertaken by USGBC’s membership.<sup>179</sup> A LEED Steering Committee (LSC) oversees any changes and development of LEED through several responsibilities. This committee is made up of a balance of members representing different interests and groups, with the goal being that one specific group does not constitute more than 25% of the LSC members.<sup>180</sup>

When it comes to a specific building project and how it obtains certification, the process is based on a review of documentation submitted online by the

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updated portions of LEED v4 with LEED v4.1 (announced in January 2019, with a further addendum made in November 2020). Sarah Stanley, USGBC Opens Registration for LEED v4.1 for New Construction and Interior Spaces, U.S. GREEN BLDG. COUNCIL (Dec. 21, 2020), <https://www.usgbc.org/articles/usgbc-opens-registration-leed-v41-new-construction-and-interior-spaces> [https://perma.cc/FC7B-MCU6]; Paula Melton, *Big Changes Hit in v4.1 Addenda for Q4 2020*, LEEDUSER: BLOG (Dec. 14, 2020), <https://leeduser.buildinggreen.com/blog/big-changes-hit-v41-addenda-q4-2020> [https://perma.cc/DS64-SYHB].

172. *Id.*

173. These facets are Integrative Process, Location and Transportation, Sustainable Sites, Water Efficiency, Energy and Atmosphere, Materials and Resources, Indoor Environmental Quality, Innovation, and Regional Priorities. *Leadership in Energy & Environmental Design*, *supra* note 154.

174. *Id.*

175. U.S. GREEN BLDG. COUNCIL, FOUNDATIONS OF LEED 3 (2009), <https://www.usgbc.org/sites/default/files/foundations-of-LEED.pdf> [https://perma.cc/6Z6X-2ZTQ].

176. *Id.* at 7.

177. *Id.*

178. *Leadership in Energy & Environmental Design*, *supra* note 154.

179. Kriss, *supra* note 171.

180. The represented groups include “(i) property/building owners (including government), developers, brokers; (ii) architectural/engineering firms, specifiers, urban planners, and designers; (iii) contractors, constructors, project managers, service suppliers, facility operators; (iv) product manufacturers and raw material suppliers; (v) building occupants/users, sustainable community advocates, unions; (vi) regulation enforcement agencies, standards developers; and (vii) utilities, energy service companies, insurers, academia, finance, others.” U.S. GREEN BLDG. COUNCIL, *supra* note 175, at 12.

project's manager. The manager first registers with USGBC, selecting the applicable rating system, such as LEED v4 O+M for existing buildings or LEED v4 Homes for residential buildings.<sup>181</sup> Registration fees vary based on the type and size of a project.<sup>182</sup> For a project manager who is a nonmember of USGBC and is putting up a new commercial building, the cost is \$1,500 for *registration* and \$5,000 for *precertification*, with the additional cost for *certification* dependent on the building's size.<sup>183</sup>

Once the project is registered, the manager submits all the documentation materials online.<sup>184</sup> A separate entity, Green Building Certification Inc. (GBCI), then reviews these materials.<sup>185</sup> Within several weeks, GBCI makes an initial decision about which level of certification has been met, but the project manager is afforded several additional weeks to submit supplementary information or to amend the initial application.<sup>186</sup> At this point, GBCI will only "review revised or newly submitted prerequisites and credits, and reconsider any anticipated credits or prerequisites for which information has changed since the return of the preliminary review."<sup>187</sup> The project team can accept these final review results or revise the application and resubmit it through an appeal.<sup>188</sup> Appeals can be essentially unlimited but they do require payment of additional fees.<sup>189</sup>

As of 2020, the cumulative number of certified LEED projects in the United States stood at 37,840, covering about 5.7 million square feet.<sup>190</sup> (Of these, 6% were certified as platinum, 37% as gold, 34% as silver, and 22% as simply certified.<sup>191</sup>) By way of perspective, the United States claims an estimated 5.9 million commercial buildings within its borders, covering a total of 97 billion square feet.<sup>192</sup> This means that the number of LEED certified projects in the United States amount to about *six-tenths of one percent* of all buildings in the United States. In terms of square footage, LEED certified projects amount to

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181. *LEED Rating System*, U.S. GREEN BLDG. COUNCIL, <https://new.usgbc.org/leed> [https://perma.cc/99LV-7DHF].

182. *LEED Certification Fees*, U.S. GREEN BLDG. COUNCIL, <https://new.usgbc.org/cert-guide/fees> [https://perma.cc/WSF9-RCBX].

183. *Id.*

184. *Guide to LEED Certification: Commercial*, U.S. GREEN BLDG. COUNCIL, <https://new.usgbc.org/cert-guide/commercial> [https://perma.cc/P3Y5-TLG7].

185. *Id.*

186. *Id.*

187. *Id.*

188. *Id.*

189. *Id.*

190. *Country Market Brief*, U.S. GREEN BUILDING COUNCIL, <https://www.usgbc.org/resources/country-market-brief> (click the "Choose Country" tab and select United States) (last visited Dec. 30, 2020).

191. *Id.* (move cursor over the LEED Certifications by Rating System pie chart to view the percentages).

192. *Table B1. Preliminary Estimates Summary Table for All Buildings, 2018*, U.S. ENERGY INFO. ADMIN., <https://www.eia.gov/consumption/commercial/data/2018/index.php?view=characteristic> (follow "XLS icon" hyperlink).

only six-thousandths of one percent of all the commercial square footage in the United States.<sup>193</sup>

Evaluations of LEED have encountered many of the same issues as with other soft law initiatives, such as selection bias from the voluntary nature of adoption.<sup>194</sup> In addition, just as with ISO 14001, concerns have been raised in the context of LEED about building owners simply going through the motions—that is, engaging in mere “window dressing”<sup>195</sup>—without seriously improving the environment.<sup>196</sup> LEED has been subjected to charges that building managers can “game the system”—or, as one architect has put it, they can go “after low-hanging fruit to rack up scores, even if underlying measures don’t result in environmental improvements.”<sup>197</sup>

LEED also presents two other distinctive issues when it comes to evaluating its impact. First, LEED buildings are by definition new, which presents challenges when their energy consumption is compared to older non-LEED buildings. Newer buildings can probably be expected to be more energy efficient, even without LEED, as they make use of newer technologies (e.g., newer HVAC, lighting, insulation) that will be already more energy efficient, regardless of whether a building is LEED-certified. Thus, even if newer LEED buildings are more energy efficient than older non-LEED buildings, it cannot be inferred that all the energy efficiency gains in the former stem from LEED.

Second, LEED certification is based on how a building is *designed*, not what it in fact achieves by way of energy consumption in use. It is also based only on documentation, not on actual measurement of performance.<sup>198</sup> Yet these differences can matter. It is one thing to certify a building as energy efficient based on how it has been built and is intended to function; it is quite another

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193. As a fraction of new building construction, the proportion that is LEED-certified is certainly larger—but still quite small. See Jeroen van der Heijden, *On the Potential of Voluntary Environmental Programmes for the Built Environment: A Critical Analysis of LEED*, 30 J. HOUS. & BUILT ENV’T 553, 560 (2015) (estimating that “LEED has achieved market coverage of 8.7% of all ‘new’ built space constructed since 1993”).

194. See *supra* notes 67–68, 70, 149 and accompanying text. See generally Borck & Coglianese, *supra* note 70.

195. See Parker & Lehmann, *supra* note 68.

196. See Van der Heijden, *supra* note 193, at 561. As Van der Heijden observes,

critics wonder how a parking garage (even if it is solar powered) that adds 1,700 parking spaces to Santa Monica’s city centre or the highly energy- and water-intensive casinos in the desert in Las Vegas can be certified under LEED. They ask why LEED does not take into account issues such as the transport of ‘sustainable’ building materials. After all, if these materials have to be transported over considerable distances, their environmental performance is de facto obsolete.

*Id.* (citations omitted).

197. Robert Orr, The Problems with LEED 3 (June 2014) (unpublished manuscript), <http://leanurbanism.org/wp-content/uploads/2014/06/Orr-LEED.pdf> [<https://perma.cc/K3T4-4YJW>].

198. To be clear, USGBC has recently started to move in the direction of incorporating performance in certain ways into its newest standards, such as LEED v4.1 and LEED O+M, but this is not the basis on which almost all LEED-certified buildings have received their energy efficiency label to date. See *supra* notes 173–174 and accompanying text.

whether those intentions are actually fulfilled.<sup>199</sup> It is conceivable, for example, that occupants of LEED buildings might modify a more energy efficient building's temperature levels to be cooler in the summer and warmer in the winter, potentially offsetting some of the anticipated reductions in energy consumption.

Many studies have examined LEED standards and their impact.<sup>200</sup> Some of these "have indicated that LEED-certified buildings do not outperform conventional buildings in terms of energy usage or greenhouse gas emissions and in certain examples they even seem to perform worse."<sup>201</sup>

An article published in the journal *Sustainability* may provide the most concise distillation of what is known at this time. Reviewing the available empirical studies that considered whether LEED-certified buildings were in fact more energy efficient in practice, the researchers characterized the existing literature as "contradictory."<sup>202</sup> In ten studies, results were consistent with the view that LEED buildings are more energy efficient in practice; however, eight studies reported results indicating that they could not be shown to be more efficient—and indeed that sometimes the LEED-certified buildings were actually less energy efficient.<sup>203</sup> It goes without saying that more research is needed.

#### IV. COMMONALITIES, ADVANTAGES, AND CHALLENGES

In this Article, I have provided three case studies of environmental soft law governance. Although numerous other nongovernmental and governmental voluntary standards and programs could also be considered, the three cases presented here have been among the most widely diffused and studied of any voluntary environmental initiatives. They also provide an opportunity to offer three concluding observations about the *commonalities*, *advantages*, and *challenges* of environmental soft law governance.

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199. See, e.g., Mireya Navarro, *Some Buildings Not Living Up to Green Label*, N.Y. TIMES (Aug. 30, 2009), <https://www.nytimes.com/2009/08/31/science/earth/31leed.html> [https://perma.cc/U7CN-PQX4].

200. See, e.g., Al-Zubaidy & Mehdi S. Kaddory, *A Literature Evaluation of the Energy Efficiency of Leadership in Energy and Environmental Design (LEED)-Certified Buildings*, 3 AM. J. CIV. ENG'G & ARCHITECTURE 1 (2015); Omair Awadh, *Sustainability and Green Building Rating Systems: LEED, BREEAM, GSAS and Estidama Critical Analysis*, 11 J. BLDG. ENG'G. 25 (2017); Elena Bernardi et al., *An Analysis of the Most Adopted Rating Systems for Assessing the Environmental Impact of Buildings*, 9 SUSTAINABILITY, no. 7, 2017, art. no. 1226, at 1; Dat Tien Doan et al., *A Critical Comparison of Green Building Rating Systems*, 123 BLDG. & ENV'T 243 (2017); Fiona Greer et al., *Energy and Water Efficiency in LEED: How Well Are LEED Points Linked to Climate Outcomes?*, 195 ENERGY & BLDGS. 161 (2019); Yueer He et al., *How Green Building Rating Systems Affect Designing Green*, 133 BLDG. & ENV'T. 19 (2018); Omar Issac Asenio & Magali A. Delmas, *The Effectiveness of US Energy Efficiency Building Labels*, 2 NAT. ENERGY 17033 (2017).

201. Van der Heijden, *supra* note 193, at 561 (citations omitted); see also JEROEN VAN DER HEIJDEN, GOVERNANCE FOR URBAN SUSTAINABILITY AND RESILIENCE: RESPONDING TO CLIMATE CHANGE AND THE RELEVANCE OF THE BUILT ENVIRONMENT 96 (2014).

202. Ali Amiri et al., *Are LEED-Certified Buildings Energy-Efficient in Practice?*, 11 SUSTAINABILITY, no. 6, 2019, art. no. 1672, at 1, 5.

203. *Id.* at 1.

First, given the different domains and objectives of the three cases examined in this Article, it is not surprising that the details of their design and implementation are also different. Nevertheless, despite these differences, the three cases reveal a set of commonalities that are more broadly found across still other examples of soft law governance. Several of these common characteristics stand out:

- *Consensus-driven processes.* The applicable guiding norms or standards in each of the cases presented here are based on a consensus formed among a limited but diverse set of actors. Included among those involved in establishing the standards in these cases are those businesses to whom they would ultimately apply.
- *Normative iteration.* All of the standards are subject to a periodic review and modification. Each of the nongovernmental systems explicitly provides for a regular updating process.
- *Third-party certification.* Certification of compliance with the applicable standards are made by third-party entities.
- *Governance competition.* Multiple voluntary standards addressing the same environmental concerns or business domains develop and then “compete” for members. This has been evident with the British and EMAS alternatives to ISO 14001, with the multiple forest certification regimes, and even with green building design, where USGBC has had its share of alternatives too (e.g., Green Globes or EnergyStar for buildings).<sup>204</sup>

These commonalities may allow for some cautious generalizations to be drawn from the three case studies in this Article.

Second, soft law systems with these kinds of commonalities hold a variety of potential advantages that make them appealing, especially for issues that otherwise seem intractable to resolve through hard law. Some of these possible advantages are as follows:

- *Soft law governance may be more feasible*, as it does not require political action by gridlocked legislative bodies and it can accommodate standards established under uncertainty (because they are not subject to any judicial review).
- *Soft law governance may be more adaptable over time*, precisely because it is more feasible.
- *Soft law governance may be less costly for target organizations to comply with*, or at least the voluntary nature of compliance means that firms will only comply when they see that doing so will be net beneficial to them.
- *Soft law governance may promote greater buy-in and legitimacy* because of its participatory and voluntary nature.
- *Soft law governance may provide a proving ground for new innovations*, as voluntary initiatives can reward environmental leaders for experimentation and for their efforts to go beyond compliance with hard law.

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204. For a discussion of various alternative green building standards, see LINDA REEDER, GUIDE TO GREEN BUILDING RATING SYSTEMS: UNDERSTANDING LEED, GREEN GLOBES, ENERGY STAR, THE NATIONAL GREEN BUILDING STANDARD, AND MORE (2011).

- *Soft law governance, by holding open competition from different standards, might produce a “race-to-the-top” effect, leading either to the survival of the most credible system or at least fostering increased rigor across competitors.*<sup>205</sup>
- *Soft law governance may help in diffusing best practices and bolstering social norms which, if sufficiently embedded in practice, could ultimately prove more effective than hard law.*<sup>206</sup>
- *Soft law governance may provide a basis for linking to and reinforcing hard law, such as when government procurement standards require bidding firms to be certified to meet otherwise voluntary standards.*

This is not to suggest that all soft law governance systems offer all of these advantages, nor is it to say that they could even be reasonably expected to do so. But these potential advantages are what typically make soft law so appealing, especially for addressing problems that seem intractable or that otherwise go unaddressed.

Finally, whatever promise that soft law governance holds must be weighed against its potential downsides or limitations. Some of these limitations have been evident in this Article’s consideration of evidence about what, if any, improved environmental outcomes have emerged from the soft law programs in the three case studies. No consideration of soft law governance, in any policy domain, should proceed without considering possibilities such as the following:

- *Soft law governance may amount merely to “greenwashing” (or its equivalent). Many soft law environmental governance systems are like ISO 14001 in that they require management steps, processes, and documentation, without necessarily requiring the documented and consistent attainment of actual results. LEED raises a similar concern in that it documents design elements, not actual performance in use. The potential for greenwashing in connection with firms’ participation in voluntary environmental programs should not be unduly discounted.*<sup>207</sup>

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205. This is an argument made in the context of hard law in DAVID VOGEL, *TRADING UP* 259 (1997). But it might explain improvements that SFI has made over the years in the face of credibility competition from FSC. Both Gulbrandsen, *supra* notes 141 & 152, and Meidinger, *supra* note 83, have argued that this is the case. Moreover, some research suggests that this race-to-the-top phenomenon has occurred with ISO 14001 and LEED. See generally Aseem Prakash & Matthew Potoski, *Racing to the Bottom? Trade, Environmental Governance, and ISO 14001*, 50 AM. J. POL. SCI. 350 (2006); Aseem Prakash & Matthew Potoski, *Investing Up: FDI and the Cross-Country Diffusion of ISO 14001 Management Systems*, 51 INT’L STUD. Q. 723 (2007); Mallory Elise Flowers et al., *In the LEED: Racing to the Top in Environmental Self-Regulation*, 29 BUS. STRATEGY & ENV’T 2842 (2020).

206. For discussion of the potential for diffusion or spillover effects, see, e.g., Thomas P. Lyon & John W. Maxwell, *Environmental Public Voluntary Programs Reconsidered*, 35 POL’Y STUDS. J., 723, 738–39 (2007); Borck & Coglianese, *supra* note 70. For empirical studies seeking to identify possible spillover effects, see, e.g., Irene Henriques et al., *Spillover Effects of Voluntary Environmental Programs on Greenhouse Gas Emissions: Lessons from Mexico*, 32 J. POL’Y ANALYSIS & MGMT. 296 (2013); William McGuire et al., *How Voluntary Environmental Programs Reduce Pollution*, 78 PUB. ADMIN. REV. 537 (2018); Rong Zhou et al., *Evaluating Voluntary Environmental Programs with Spillover Effects*, 7 J. ASS’N ENV’T & RES. ECON. 145 (2020).

207. See, e.g., Thomas P. Lyon & A. Wren Montgomery, *The Means and End of Greenwash*, 28 ORGANIZATION & ENV’T 223–49 (2015); Magali A. Delmas & Vanessa Cuere Burbano, *The Drivers of Greenwashing*, 54 CAL. MGMT. REV. 64–87 (2011). Requirements for third-party certification purport to



- *Soft law governance may only have a modest impact on the overarching problems it seeks to solve because it is, well, soft.* A soft law system depends on other external or internal motivations, rather than providing much of an incentive on its own. The scope of participation in a voluntary regime might thus be quite limited and the actual achievements of those businesses that participate might be limited as well.<sup>208</sup>
- *Soft law governance may prove only deceptively successful because of selection bias*—attracting those participants that were already more environmentally committed.<sup>209</sup>
- *Soft law governance, by holding open competition from different standards, might produce a race to the bottom*—or, at least, the proliferation of competing standards might undercut the force of any one of them or reduce their signaling value to others.
- *Soft law governance's success may depend ultimately on the background threat of hard law.* The apparent success of at least one voluntary water pollution program, for example, has been shown to have been effective mainly because of the backdrop of threats of enforcement actions.<sup>210</sup> Many other soft law programs have been adopted with hard law lurking or looming in the background—even if only in the shadows—and it may be that

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combat greenwashing by adding credibility to a soft law system—but such certification schemes can then create their own credibility challenges. For illuminating discussion of third-party certification, see Shana Starobin & Erika Weinthal, *The Search for Credible Information in Social and Environmental Global Governance: The Kosher Label*, BUS. & POL., Oct. 2010, at 1 (2010); Lesley K. McAllister, *Regulation by Third-Party Verification*, 53 B.C. L. REV. 1 (2012); Lesley K. McAllister, *Harnessing Private Regulation*, 3 MICH. J. ENV'T & ADMIN. L. 291 (2014); Timothy D. Lytton & Lesley K. McAllister, *Oversight in Private Food Safety Auditing: Addressing Auditor Conflict of Interest*, 2014 WIS. L. REV. 289 (2014); Timothy D. Lytton, *Competitive Third-Party Regulation: How Private Certification Can Overcome Constraints That Frustrate Government Regulation*, 15 THEORETICAL INQUIRIES L. 539 (2014); Jean-Pierre Galland, *Big Third-Party Certifiers and the Construction of Transnational Regulation*, 670 ANNALS AM. ACAD. POL. & SOC. SCI. 263 (2017); Allison Marie Loconto, *Models of Assurance: Diversity and Standardization of Modes of Intermediation*, 670 ANNALS AM. ACADEMY POL. & SOC. SCI. 112 (2017).

208. For a discussion of the limitations on participation in soft law programs—both in terms of limited incentives and the costs of participation—see Coglianese & Nash, *supra* note 8. One problem arises when the designers of voluntary programs try to increase program rewards in an attempt to increase participation. To justify the greater rewards, program designers tend to increase paperwork and auditing requirements to ensure that only truly worthy businesses receive the increased rewards. *Id.* But the increase in program complexity and administrative burdens serves to counteract the effects of the increase in rewards, with participation actually declining even though incentives have ostensibly increased. *Id.*; see also Luis Inaraja Vera, *Assessing the Performance of Voluntary Environmental Programs*, 2020 UTAH L. REV. 795, 802 (2020) (arguing that “injecting more complexity into the design of voluntary programs can be counterproductive”).

209. See Borck & Coglianese, *supra* note 70, at 311, 316; Richard D. Morgenstern & William A. Pizer, *Concluding Observations What Can We Learn from the Case Studies?*, in REALITY CHECK: THE NATURE AND PERFORMANCE OF VOLUNTARY ENVIRONMENTAL PROGRAMS IN THE UNITED STATES, EUROPE, AND JAPAN 166, 181 (Richard D. Morgenstern & William A. Pizer eds., 2007).

210. Tapas K. Ray & Kathleen Segerson, *Clean Charles 2005 Initiative: Why the Success?*, in LEVERAGING THE PRIVATE SECTOR: MANAGEMENT-BASED STRATEGIES FOR IMPROVING ENVIRONMENTAL PERFORMANCE 201, 218–21 (Cary Coglianese & Jennifer Nash eds., 2006). See generally Cary Coglianese & Jennifer Nash, *Management-Based Strategies for Improving Private-Sector Environmental Performance*, 36 ENV'T. L. REP. 10003 (2006); THOMAS P. LYON & JOHN W. MAXWELL, CORPORATE ENVIRONMENTALISM AND PUBLIC POLICY 253–54 (2004).

the hard law is responsible for some substantial portion of any success that soft law governance may appear to have had.<sup>211</sup>

- *Soft law governance may serve to stave off or undercut the needed political support for more effective hard law interventions.* To the extent that soft law governance interventions are more symbolic than substantive, the possibility that such voluntary programs could siphon off support for more meaningful hard law interventions should be considered.

Again, this is not to suggest that all of these downsides will be real or realized in practice. Rather, it is to recommend that any effort to think hard about the reliance on soft law as a solution for difficult public problems should at least entertain that the outcomes from voluntary standards may not prove to be as grand as their biggest enthusiasts might hope.

In the end, policy choices are comparative. That means that policy decision-makers must think about how soft law governance compares with hard law governance—and about how specific forms of soft and hard law governance compare with each other. With respect to some problems or facets of problems, and under certain conditions, soft law may well compare favorably to hard law, or at least may work productively to complement hard law approaches. But not always. Decisions about governance ultimately demand making normative judgments, often undertaken under conditions of uncertainty, and they can and should be informed by careful analysis, available evidence, and an attempt to anticipate what otherwise might remain unanticipated consequences.

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211. Cary Coglianese & Jennifer Nash, *Motivating without Mandates? The Role of Voluntary Programs in Environmental Governance*, in *DECISION MAKING IN ENVIRONMENTAL LAW* 237, 251 (LeRoy C. Paddock et al. eds., 2016). For a thoughtful plea for additional research on the synergies between hard law and soft law, see J. Alberto Aragón-Correa et al., *The Effects of Mandatory and Voluntary Regulatory Pressures on Firms' Environmental Strategies: A Review and Recommendations for Future Research*, 14 *ACAD. MGMT. ANNALS* 339 (2020).